

Management Prescription Analysis for Mohave Ground Squirrel

Prepared by the West Mojave Coordinated Management Plan Team for
California Department of Fish and Game and U.S. Fish and Wildlife Service

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Background: In March 1998, the West Mojave Coordinated Management Plan Team (Team) met with representatives of the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) to discuss management prescriptions for the conservation of the desert tortoise and Mohave ground squirrel (MGS). The prescriptions were based on Dr. Boarman's threats analysis for the tortoise, which identified 22 threats that he assigned as High, Medium, and Low effects. USFWS (Ray Bransfield) and CDFG (Glenn Black, John Gustafson, Frank Hoover, Becky Jones, Rocky Thompson) representatives considered input from the Team and identified 145 management prescriptions relative to the 22 threats that would result, in part, in tortoise conservation. There was a consensus that the prescriptions would also serve to conserve/protect MGS habitat.

Since those meetings, Ed LaRue has revisited the 22 threats affecting tortoises and considered if those threats would also affect MGS. An MGS threats analysis was completed by Dave Laabs (see MGS section in current management situation), although he did not attempt to rank the threats into categories of Low, Medium, and High (the threats listed below are given in descending order of High, Medium, and Low relative to tortoises). For this reason, we have eliminated the "Rank" section (which was used for tortoises) from the management prescriptions that follow. Table 1 lists each of the 22 threats and its expected effect, if any, on MGS.

Table 1. Effects, if any, of 22 threats to Mohave ground squirrel.

<u>Threat</u>	<u>Would Affect MGS</u>	<u>Would Not Affect MGS</u>	<u>May Affect MGS</u>
Urbanization & Energy Development	Yes	-	-
Disease	-	No	-
Construction	Yes	-	-
Off-Highway Vehicles	Yes	-	-
Landfills & Transfer Stations	-	No	-
Military Operations	Yes	-	-
Roads/Highways/Railroads	Yes	-	-
Agriculture	Yes	-	-
Utility Corridors	Yes	-	-
Fire	Yes	-	-
Livestock Grazing	Yes	-	-
Subsidized Predation	-	No	-
Mineral Development	Yes	-	-
Non-OHV Recreation	Yes	-	-
Invasive Weeds	Yes	-	-
Garbage & Litter	-	No	-
Noise	-	-	Unknown
Commercial Uses	Yes	-	-
Vandalism	-	No	-
Handling & Manipulation	-	No	-
Wild Horses/Burros	-	-	Unknown
Drought	Yes	-	-

It is relatively clear that Disease, Vandalism, and Handling & Manipulation are threats that affect tortoises that do not affect MGS (although some unknown disease could be involved). We assume that subsidized predation - mostly common raven predation on tortoises - is not likely to be an issue relative to MGS, although we have no data to support this assertion. We expect that Landfills & Transfer Stations and Garbage & Litter are less a threat to MGS than tortoises, again because raven predation affects tortoises and has not been documented for MGS.

In the following analysis, we have eliminated the management prescriptions that were designed to minimize threats associated with the "No" and "Unknown" determinations tabulated above. Again, we have also eliminated the "Rank" section from each of the prescriptions, as those ranks were analyzed relative to tortoises, not MGS.

MGS versus Tortoise Management Areas: One critical difference between Tortoise Management Areas and MGS Management Areas is given in the following sections. For tortoises, there is a large "Tortoise Management Area" (TMA) that basically identifies essential habitat for tortoises, and more or less captures tortoise Critical Habitat and Desert Wildlife Management Areas (DWMAs), the latter of which were identified in the Desert Tortoise (Mojave Population) Recovery Plan. The TMA is further segregated into "Conserved Habitat Areas" (CHA) and "Protected Management Areas" (PHA), both of which are essential to tortoise conservation, although more restrictive management prescriptions are proposed for CHA relative to PHA. Some differences are explained in the next several paragraphs.

In 1992-3, MGS experts, including agency biologists, identified 18 habitat polygons that represent essential habitat for MGS conservation. That team identified nine polygons of "High Quality Habitat" and nine polygons as "Medium Quality Habitat." During the 1998 evaluations, however, there was a consensus that insufficient information is available to differentiate habitat quality, and that the 18 polygons represented habitats that should be conserved without implying anything about the quality thereof. As such, with minor boundary revisions, we are proposing that there be 11 management areas for MGS conservation. Unlike for the tortoise, no sub-areas analogous CHAs and PHAs have been identified for MGS. Throughout this document, "MGS Management Areas" and "MGS polygons" are synonymous and are proposed for MGS conservation.

The tortoise management prescriptions are generally applicable to MGS. Accordingly, we have adopted the table of tortoise management prescriptions for MGS, modifying prescriptions and supporting materials where necessary. Rather than focusing on the Tortoise Management Area, Middle Management Areas, and Impacted Habitat Areas, the MGS table focuses on management inside and outside MGS Management Areas. Given this new dichotomy, we have eliminated the "Applicable Management Areas" section from the following analysis, which was a part of the tortoise management analysis. For your information, we present the tortoise management prescriptions in regular font followed by the modified MGS prescriptions in bold italics, as the following example demonstrates:

1. The agencies and Team will determine Impact Zones, Middle Management Zones, and Conservation Districts to be reviewed and commented on by the Super Group.

1. The agencies and Team will determine MGS Management Areas to be reviewed and commented on by the Super Group.

Where a given management prescription is not considered relevant to MGS conservation, we have indicated "Not Applicable" following the prescription, as the following example demonstrates:

12. If Fort Irwin Expands South: No energy development in the Tortoise Management Area.

12. Not Applicable: (As necessary, we include the rationale for the prescription's inapplicability in parenthesis).

Agency Goal Statements supporting management prescriptions: There is one other major assumption made relative to the goal statements derived during tortoise/MGS evaluations: We have substituted "MGS" for "desert tortoise" for each goal statement and otherwise modified the goal statement as necessary, as the following example demonstrates:

Goal Statement from USFWS/CDFG: Establish guidelines for growth that are compatible with recovery [conservation] of the desert tortoise [MGS]. Institute a mitigation fee program that partially funds recovery [conservation].

As given in this example, the pertinent changes are denoted in brackets “[...]”. If the next agency evaluation confirms that these changes are appropriate, the changes will be incorporated into the document (eliminate the redundant wording and brackets) before giving it to the Super Group.

Applicable versus Non-applicable jurisdictions: For the analogous tortoise analysis, we indicated “Applicable” and “Non-applicable Jurisdictions,” which varied depending on the prescription being discussed. As may be observed on pertinent maps, “Applicable Jurisdictions” are those jurisdictions that would have some portion of their lands within a proposed MGS Management Area. “Non-applicable Jurisdictions,” generally, would not have a designated MGS Management Area on their lands. Where applicability is related more to management prescriptions than landownership, we provide rationale under “Team Recommendations.”

Because MGS is State-listed only, the following federal jurisdictions are not considered Applicable Jurisdictions: China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo. However, most of the management plans for these bases do consider conservation strategies for protection of MGS habitat, and extensive studies have been conducted at Edwards and China Lake. Several jurisdictions are outside the range of MGS, so impacts associated with development lack the nexus to require MGS management: Marine Corps Air Ground Combat Center at Twentynine Palms, City of Twentynine Palms, and Town of Yucca Valley.

Pertinent documents (Bureau manual 6840 and MOU) should be reviewed to determine accuracy of the following information. The Bureau of Land Management is a special case; although MGS is not federally listed, special policies are implemented to consider such species (Tom Egan, pers. comm., 13 Oct 1998). The Bureau’s manual 6840 (which is currently being updated) lists special provisions for special-status species, including State-listed, threatened and endangered species. In the Bureau’s manual, it states that the Bureau will implement policies to help the CDFG realize its management objectives for State-listed, threatened and endangered species. Prescription 6840.2 considers State-listed plants and animals, which requires that the Bureau design policies and management decisions for the conservation of those species. There is also a Memorandum of Understanding (MOU) between the Bureau and CDFG to, among other things, report Bureau projects to the CDFG where a State-listed species, including MGS, may be affected. Egan indicated that many Bureau projects within the range of MGS have affected or potentially affected tortoises, so that impacts to MGS have been addressed relative to tortoise mitigation and land compensation. Given these policies, the Bureau of Land Management is considered an Applicable Jurisdiction for each of the relevant prescriptions described on the following pages.

Prescriptions relative to southward Fort Irwin expansion. During the time of this analysis, there was a newspaper article published that indicates a potential westward expansion of Fort Irwin onto China Lake’s Mojave B Range. As such, the following determination - *“Not Applicable: The southern expansion area is not within the known range of MGS”* - may no longer apply; a westward expansion would be within MGS range. A westward expansion would also likely impact one of the proposed MGS Management Areas. It may be feasible to modify the boundary of the northeastern portion of this polygon (the polygon is actually a combination of two previously recommended polygons) so that a military corridor could pass between the two areas, if there is a westward expansion. In any case, a westward expansion would affect this analysis and the Fort Irwin expansion would be applicable to MGS management.

This exercise is intended for “agency eyes only;” hence the reference to the analogous tortoise prescriptions, which will later be dropped. Once the prescriptions have been modified as necessary for MGS conservation, we will delete all reference to tortoises and allow this analysis to stand alone. In the final document, we would list only those threats that are applicable and the associated management prescriptions. As you review the following pages, please consider pertinent examples (to be used under “Team Recommendations”) and “Potential Task Group Activities” so that we can ensure that the public is considering the full range of alternatives that would effectively result in MGS conservation. The final analysis (including modification of this document) will be given to the public, Super Group in December 1998.

1. A Tortoise Management Area is recommended, to be comprised of Conserved Habitat Areas and Protected Habitat Areas; Middle Management Areas; and Impacted Habitat Areas.

1. The agencies and Team will determine MGS Management Areas to be reviewed and commented on by the Super Group.

2. Identify specific Impacted Habitat Areas, which are likely to be developed in the foreseeable future; identify the names for all management areas.

2. Not Applicable: Under the current proposal, there would be two areas: inside and outside MGS Management Areas. As can be seen from maps showing MGS polygons, no Cities or other areas identified as "Impacted Habitat Areas" for the tortoise are included within the MGS polygons.

Associated Threat: Urbanization and Development

Goal Statement from USFWS/CDFG: Establish guidelines for growth that are compatible with recovery [conservation] of the desert tortoise [MGS]. Institute a mitigation fee program that partially funds recovery [conservation].

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, Joshua Tree National Park, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

1. & 2. Unlike the variable Tortoise Management Areas (e.g., Tortoise Management Areas vs. Middle Management Areas vs. Impacted Habitat Areas), there would be 11 MGS Management Areas, inside of which certain management prescriptions would apply and outside of which the prescriptions would not apply. "Applicable Jurisdictions" include participating agencies that have lands on which the MGS Management Areas are proposed. The portions of Edwards Air Force Base, China Lake Naval Weapons Station, and Fort Irwin proposed for management areas would be managed as per base-wide Integrated Natural Resource Management Plans, applicable Ecological Opinions, etc.

I expect to resolve boundary issues at the 28 Oct meeting, when we should determine if California City and Los Angeles County are applicable jurisdictions or not.

Potential Task Group Activities:

(A) Proposed concepts for the 11 MGS Management Areas, including boundaries and management prescriptions (given on the following pages), should be discussed with affected jurisdictions.

(B) The Team will accurately identify management area boundaries to determine the actual jurisdictions that would be affected.

3. Determine how plan (conservation measures) will be funded.

4. Fees compensating development in Tortoise Management Area should be higher than in non-Tortoise Management Areas.

3. & 4. Determine fee zones: (a) fees inside MGS Management Areas versus outside but still within MGS range; (b) fees compensating development in MGS Management Areas (excluding military bases) will be higher than in non-MGS Management Areas; (c) fee structure relative to Tortoise Management Areas; etc.

11. If Fort Irwin Expands South: May consider higher compensation fees in Tortoise Management Area, including Conserved and Protected Habitat Areas.

11. Not Applicable: The southern expansion area is not within the known range of MGS.

Associated Threat: Urbanization and Development

Goal Statement from USFWS/CDFG: Establish guidelines for growth that are compatible with recovery [conservation] of the desert tortoise [Mohave ground squirrel]. Institute a mitigation fee program that partially funds recovery [conservation].

Applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Twentynine Palms, Victorville, Yucca Valley, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District, Bureau of Land Management.

Non-applicable Jurisdictions: State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

3., 4., & 11. The ultimate goals of the fee structure include (a) collect sufficient funds to allow for implementation of the MGS conservation portion of the plan, including, particularly, scientific study; (b) ensure that there is a nexus between the fees being collected and the conservation measures implemented (e.g., fees collected in Lancaster and Palmdale may go towards Mohave ground squirrel conservation rather than desert tortoise, as tortoises are mostly extirpated from the southwestern part of the planning area); (c) fees should be relatively higher in MGS Management Areas to facilitate conservation of that area and relatively lower outside MGS Management Areas so that conservation costs are not overly burdensome to the developer; etc. The military bases are considered non-applicable jurisdictions because MGS has no federal status, nor does current management mitigate impacts by paying fees.

Potential Task Group Activities:

(A) Given that military bases are not currently assessed fees for compensation (and are not likely to be for a State-listed species), the Team will discuss other prescriptions (mostly delineated in current, basewide management documents) with the bases to assess their MGS conservation value.

(B) There needs to be discussion on the relationship between Tortoise Management Areas and MGS Management Areas. Will the fees be the same for Tortoise and MGS Management Areas? What about areas in western Lancaster and Palmdale, which are considered to be outside the current MGS range; would they be assessed a fee?

(C) Determine specific fees for specific areas, using variable fee structure with highest fees for MGS Management Area and relatively lower fees (assuming they are not within Tortoise Management Areas) for projects outside MGS Management Areas but still within the MGS range.

(D) With help of the Team and pertinent experts (Dr. Phil Leitner), determine costs of the scientific study and monitoring that needs to be completed.

(E) Determine how fees will be collected, accounted for, and incorporated into plan implementation. Will there be "pure MGS fees" versus "pure tortoise fees?" How would the money be spent for a project that occurs within both a Tortoise and MGS Management Area? Would the money be spent for research only, habitat acquisition, etc?

(F) May determine the approximate contribution to the plan through developer's fees, know (from the above analysis) the cost of MGS scientific study, and identify the gap between developer and non-developer funding sources so that non-developer contributions can be estimated. It is expected that costs to study MGS ecology and to identify adaptive management scenarios will be relatively inexpensive compared to land acquisition, road fencing, route closure, etc. and other management prescriptions relative to tortoise conservation.

If Fort Irwin expands to the west, prescription 11 may be applicable.

5. Identify construction types and locations that would be exempt from fees or other mitigation (see section 2.1.6.1. on page 2-23 of Draft 3); consider single-family scenario versus commercial, industrial, high density development (determine dichotomy or variable approach to fee requirements).

5. Proposed management prescription for the tortoise adopted, unchanged for MGS.

Associated Threat: Urbanization and Development

Goal Statement from USFWS/CDFG: Establish guidelines for growth that are compatible with recovery [conservation] of the desert tortoise [MGS]. Institute a mitigation fee program that partially funds recovery [conservation].

Applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Victorville, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District, Bureau of Land Management.

Non-applicable Jurisdictions: State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Twentynine Palms, Yucca Valley, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

5. There are no specific recommendations from the Team on fee-exempt development, although the following examples may be considered: (a) projects located on land on which the habitat has already been permanently lost, including fully developed parcels; (b) projects located on parcels, or portions of parcels, for which a habitat mitigation fee has already been paid; (c) maintenance activities within existing utility easements or rights-of-way; (d) changes in land-use on developed property (but not including conversion of agricultural lands); (e) additions of existing non-single-family residential buildings not exceeding 2,500 square feet in gross ground floor area; (f) tenant improvements; (g) repair and replacement of existing structures, damaged by natural or human causes, with no increase in floor area; and (h) project proponent election to protect appropriate habitat (i.e., Conserved or Protected Habitat Area) in lieu of a mitigation fee.

Potential Task Group Activities:

(A) Task Group should determine types of development activities that will be exempt from such fees. It is important that all City and County jurisdictions and other concerned entities (e.g., Building Industry Association, Bureau of Land Management, etc.) are represented in this Task Group or otherwise send in concerns and recommendations for consideration by the Task Group.

(B) As with the previous prescription, it is important to discuss the nexus between the fee and the impact. Is it appropriate for fees collected in Lancaster, Palmdale, Ridgecrest, and Los Angeles County, for example, to be earmarked for MGS conservation only, or should those fees also contribute to the conservation of tortoises?

6. Determine mechanism for other funding sources, so that fees are not only based on new development and ground disturbance.

6. Proposed management prescription for the tortoise adopted, unchanged for MGS.

Associated Threat: Urbanization and Development

Goal Statement from USFWS/CDFG: Establish guidelines for growth that are compatible with recovery [conservation] of the desert tortoise [MGS]. Institute a mitigation fee program that partially funds recovery [conservation].

Applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Victorville, Bureau of Land Management, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District.

Non-applicable Jurisdictions: State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Twentynine Palms, Yucca Valley, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

6. The intent here is, among other things, to determine all income sources so that the plan is not implemented solely on fees provided by the developer. Additional income sources may be State, federal, appropriated funds, grants, contributions, etc.

Potential Task Group Activities:

(A) Discuss all potential income sources for the plan. Again, likely best to determine (1) cost of MGS study and conservation and (2) projected developer fees to identify (1 - 2 = 3) (3) necessary costs that would not be covered by developer fees.

(B) As with previous prescriptions, discuss nexus to impacts: Would all fees collected from certain areas go to MGS study and conservation, or would a standard fee be collected from all applicable jurisdictions and a portion of the fee go to tortoise management and MGS study? Are Yucca Valley and Twentynine Palms, which are outside the range of MGS, truly "Non-applicable Jurisdictions?" (would not pay fees, or not have part of that fee go to MGS conservation).

7. The plan will develop a curriculum on environmental education (or identify agencies to do this) that can be presented to school districts. Is there any means to ensure that this curriculum will be used (can Counties and Cities ensure that this program is implemented?).

7. Proposed management prescription for the tortoise adopted, unchanged for MGS.

Associated Threat: Urbanization and Development

Goal Statement from USFWS/CDFG: Establish guidelines for growth that are compatible with recovery [conservation] of the desert tortoise [MGS]. Institute a mitigation fee program that partially funds recovery [conservation].

Applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Twentynine Palms, Victorville, Yucca Valley, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, Bureau of Land Management, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Non-applicable Jurisdictions: This measure should be applicable to all jurisdictions.

Team Recommendations:

7. The purpose of the program would be, in part, to inform the public about the effects of urbanization and development on MGS. Several years ago, the Morongo Unified School District was responsible, under the Biological Opinion issued for the Onaga Elementary School development project, to develop a desert tortoise education program for the District. Edwards Air Force Base and San Bernardino County Museum have also worked extensively to develop education programs. It may be appropriate to contact Laura Stockton of the Desert Tortoise Preserve Committee to discuss education materials they have developed for tortoise (and MGS) awareness and life history information. Bureau of Land Management, and State Parks and Recreation should also have materials and programs in place that may benefit this effort.

Whereas most of the above information was presented relative to desert tortoises, one of the goals of the education program is to increase awareness and appreciation of the desert, including MGS conservation. As such, education materials may target several key, "umbrella" species, such as the tortoise and MGS, to teach students of the value of desert conservation and resource protection.

Potential Task Group Activities:

(A) City and County jurisdictions should review existing education materials, if any, that may help address this issue.

(B) Representatives from the organizations listed above, under "Team Recommendations," should be invited to serve on this Task Group. Alternatively, the Task Group should solicit support from the organizations (or appoint one of them as the lead) to develop the education program.

(C) City and County jurisdictions should discuss the implementation of such an education program in its school districts.

(D) The cost of such a program should be determined by the Task Group.

(E) The Task Group should ensure that MGS is part of any education program developed under this plan.

8. Need to discuss fencing as a management tool relative to the Tortoise Management Area: consider fencing to minimize impacts of Helendale on areas to the west; etc.

8. Need to discuss fencing as a management tool relative to MGS Management Areas: Does fencing benefit the species? Fragment it? Consider fencing to minimize impacts of Inyokern on areas to the south; etc.

Associated Threat: Urbanization and Development

Goal Statement from USFWS/CDFG: Establish guidelines for growth that are compatible with recovery [conservation] of the desert tortoise [MGS]. Institute a mitigation fee program that partially funds recovery [conservation].

Applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Victorville, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo.

Non-applicable Jurisdictions: This measure should be applicable to all jurisdictions (except Twentynine Palms, Yucca Valley, Joshua Tree National Park, and Marine Corps Air Ground Combat Center at Twentynine Palms), including federal agencies, given that they may be responsible for fencing relative to tortoise protection.

Team Recommendations:

8. As discussed here, fencing is relative to the interface between Towns, Cities, recreational areas, etc. and MGS Management Areas (fencing of roads and highways is discussed as a separate issue). The example mentioned would consider the feasibility of installing a fence along the south side of Bowman Road, at the interface between Inyokern to the north and Bureau of Land Management lands to the south, which is a recommended boundary of the MGS Management Area that would be located south of Inyokern and west of Ridgecrest. A good signing program, identifying the area for MGS conservation and encouraging people to stay on roads, for example, may substitute for fencing.

Potential Task Group Activities:

(A) With help from the Team (and representatives from CDFG?), the Task Group should discuss strategies (location, purpose, cost, materials, etc.) to minimize human impacts to adjacent management areas through fencing.

9. Multiple Use Classes identified for Bureau of Land Management lands in the California Desert Conservation Area (CDCA) Plan would be Class L (Limited Use) or C (Wilderness) in the designated Tortoise Management Area.

10. Conserved Habitat Areas should be designated as ACECs (Areas of Critical Environmental Concern) on Bureau of Land Management lands.

9. & 10. Multiple Use Classes identified in the CDCA Plan would be Class L or C in designated MGS Management Areas, which would be considered for ACEC status on Bureau of Land Management lands.

Associated Threat: Urbanization and Development

Goal Statement from USFWS/CDFG: Establish guidelines for growth that are compatible with recovery [conservation] of the desert tortoise [MGS]. Institute a mitigation fee program that partially funds recovery [conservation].

Applicable Jurisdiction: Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Twentynine Palms, Victorville, Yucca Valley, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

9. & 10. The Team, USFWS, and CDFG should discuss this concept with the Bureau of Land Management for feasibility. Given the checkerboard land ownership pattern, prescriptions implemented for public lands administered by the Bureau of Land Management should be consistent/compatible with prescriptions implemented on adjacent, private lands. It is the Team's recommendation, pending additional input from the agencies and Bureau of Land Management, that public lands within MGS Management Areas, which are mostly managed by the Bureau, be considered as ACEC's (Areas of Critical Environmental Concern), or other protective status, dedicated to the conservation of MGS (in most cases, the areas are also habitat for the tortoise). Whereas this may be possible with the tortoise, it remains to be seen if such a suggestion would be entertained by the Bureau of Land Management.

Potential Task Group Activities:

(A) Although City and County jurisdictions are listed above as "Non-Applicable," there may need to be Task Group discussions on the public/private land interface and applicability of management prescriptions implemented for a given management area, inclusive of all lands within its boundaries.

(B) The Team should further review management plans of the bases (Edwards, China Lake, and Fort Irwin) relative to MGS to see if it can endorse those plans through the West Mojave Plan. Following or during review, the Team should meet with the bases to discuss integration of their plans into the overall conservation strategy for MGS.

(C) It is vital that the Bureau of Land Management participate in the planning process to determine the level of protection it can provide for this State-listed species. Is the ACEC designation feasible for this federal agency? If not, are there other land use categories that can effectively provide protection to MGS in the newly proposed management areas?

12. If Fort Irwin Expands South: No energy development in the Tortoise Management Area.

12. Not Applicable: The southern expansion area is not within the known range of MGS.

Associated Threat: Urbanization and Development

Goal Statement from USFWS/CDFG: Establish guidelines for growth that are compatible with recovery [conservation] of the desert tortoise [MGS]. Institute a mitigation fee program that partially funds recovery [conservation].

Applicable Jurisdictions: None

Non-applicable Jurisdictions: None.

Team Recommendations:

12. None.

Potential Task Group Activities:

(A) None.

If Fort Irwin expands to the west, this prescription(s) may be applicable.

13. If Fort Irwin Expands South: Consider inclusion of additional lands into the Tortoise Management Area (e.g., Brisbane Valley, California City, south of Edwards, Bureau of Land Management Open Areas, etc.)

13. Not Applicable: The southern expansion area is not within the known range of MGS; nor is there a need to connect areas east and west of the Mojave River, as MGS is considered absent from the eastern side of the river in this region (Brisbane Valley would not be applicable to MGS management).

Associated Threat: Urbanization and Development

Goal Statement from USFWS/CDFG: Establish guidelines for growth that are compatible with recovery [conservation] of the desert tortoise [MGS]. Institute a mitigation fee program that partially funds recovery [conservation].

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

13. None.

Potential Task Group Activities:

(A) None.

If Fort Irwin expands to the west, this prescription(s) may be applicable.

14. Issues relative to desert tortoise diseases (e.g., Upper Respiratory Tract Disease, cutaneous dyskeratosis, etc.) should be considered at the level of the Management Oversight Group (MOG).

14. Not Applicable: As used here, "disease" refers to Upper Respiratory Tract Disease, which is applicable to desert tortoise but not MGS. No prescriptions relative to disease have been identified for MGS.

Associated Threat: Disease

Goal Statement from USFWS/CDFG: Minimize opportunities to spread the disease and facilitate research to find an answer.

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

14. None.

Potential Task Group Activities:

(A) None.

15. Encourage disease research within the West Mojave relative to management.

15. Not Applicable: As used here, "disease" refers to Upper Respiratory Tract Disease, which is applicable to desert tortoise but not MGS. No prescriptions relative to disease have been identified for MGS.

Associated Threat: Disease

Goal Statement from USFWS/CDFG: Minimize opportunities to spread the disease and facilitate research to find an answer.

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

15. None

Potential Task Group Activities:

(A) None.

16. Educate public about not releasing captive tortoises.

16. Not Applicable to MGS.

Associated Threat: Disease

Goal Statement from USFWS/CDFG: Minimize opportunities to spread the disease and facilitate research to find an answer.

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

16. None.

Potential Task Group Activities:

(A) None.

17. Continue to have authorized tortoise handlers use sterile techniques to avoid spreading the disease.

17. Not Applicable: As used here, "disease" refers to Upper Respiratory Tract Disease, which is applicable to desert tortoise but not MGS. No prescriptions relative to disease have been identified for MGS.

Associated Threat: Disease

Goal Statement from USFWS/CDFG: Minimize opportunities to spread the disease and facilitate research to find an answer.

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

17. None.

Potential Task Group Activities:

(A) None.

18. The Team (with input from the agencies and jurisdictions) will determine areas where tortoise removal surveys are not required.

19. In other areas (to be determined) have only one tortoise survey to remove tortoises (no presence-absence surveys, as at present); likely will not need monitoring or fencing. Where there are no removal surveys (i.e., in Exclusion Zones), a biologist would be on call or another contingency established to rescue a tortoise incidentally found in the Exclusion Zone.

21. In County Impacted Habitat Areas, the Team will recommend areas for each small community (Helendale, Lake Los Angeles, etc.) in which surveys would and would not be required, as with the City Impacted Habitat Areas.

23. The scenario given above would ignore the City/County dichotomy, and determine survey removal zones versus non-survey removal zones, based on housing density and other factors.

18., 19., 21., & 23. Under the proposed conservation strategy, CDFG would not require Cumulative Human Impact Evaluation Forms (CHIEFs) to be completed, nor would trapping be required. A brief site visit to determine if compensable habitat would be lost to a given project may be required.

Associated Threat: Construction Activities

Goal Statement from USFWS/CDFG: Minimize disturbance and loss of habitat and incidental take of tortoises [MGS].

Applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Victorville, Bureau of Land Management, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District.

Non-applicable Jurisdictions: State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Twentynine Palms, Yucca Valley, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

18. - 23. Under the current management situation, a habitat analysis is required, including a data base search, to determine if MGS may be affected by a given project. CHIEFs (see prescription, above) are no longer used; trapping may be required on a case-by-case basis if the proponent does not choose to assume MGS presence and pay applicable fees. As per prescription 5., there may be certain sites for which project development will not require mitigation. A site visit may be required to determine if the project is exempt from mitigation fees or not. Site visits would not be required for jurisdictions outside the range (particularly Twentynine Palms and Yucca Valley).

Under the proposed scenario, no trapping would be required for any projects, instead the proponent would pay the applicable fee to compensate impacts. We expect a dichotomy in the fee structure: inside versus outside MGS Management Areas, with fees being relatively higher inside the management area. For many proponents, this scenario would be much less costly than trapping, and the uncertainty of paying mitigation fees *in addition to* trapping fees would no longer be a problem.

Potential Task Group Activities:

(A) As necessary, the Task Group should discuss this approach or an alternative. Fee structure, nexus, etc. is discussed in several prescriptions, including 3., 4., 5., etc.

20. Within Impacted Habitat Areas, whether removal surveys are required or not, there would be no monitoring. A biologist would be on call to rescue any tortoises wandering into harm's way. Temporary fencing may be required on sites where tortoises were removed to prevent immigration by adjacent tortoises.

22. Suggest that monitoring be required in County Impacted Habitat Areas where evidence of tortoises is found; one approach: if no sign is found, monitoring would not be required. Biologist would be on call as a contingency should tortoises wander into non-monitored sites.

20. & 22. Not Applicable: Removal surveys are relative to tortoises only, not MGS (see modifications given in previous prescription). Monitoring is also applicable only to tortoise.

Associated Threat: Construction Activities

Goal Statement from USFWS/CDFG: Minimize disturbance and loss of habitat and incidental take of tortoises [MGS].

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

20. & 22. None.

Potential Task Group Activities:

(A) None.

24. Need to discuss the disposition of tortoises removed from certain areas (City versus County?)

24. Not Applicable: Under the current management situation, MGS is not removed from construction sites, nor is there a new proposal to do so.

Associated Threat: Construction Activities

Goal Statement from USFWS/CDFG: Minimize disturbance and loss of habitat and incidental take of tortoises [MGS].

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

24. None.

Potential Task Group Activities:

(A) None.

25. Determine mitigation and compensation strategies for the Tortoise Management Area that would discourage but not prevent development. Broad categories are (a) variable mitigation fees, which is related to variable compensation (mitigate 1:1 in Victorville and 5:1 in the Tortoise Management Area).

25. Determine mitigation and compensation strategies for projects inside and outside MGS Management Areas that would discourage but not prevent development inside those areas. Broad categories are (a) variable mitigation fees, which is related to variable compensation (for example, mitigate 1:1 outside MGS Management Areas and 5:1 inside).

Associated Threat: Construction Activities

Goal Statement from USFWS/CDFG: Minimize disturbance and loss of habitat and incidental take of tortoises [MGS].

Applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Victorville, Bureau of Land Management, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District.

Non-applicable Jurisdictions: State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Twentynine Palms, Yucca Valley, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

25. Aspects of this prescription are discussed in points 3., 4., 5., and 6. under the threat, titled “Urbanization and Development.” Again, the goal is to discourage impacts in MGS Management Areas, and to a lesser extent, in areas throughout the range of MGS.

Potential Task Group Activities:

(A) Task Group(s) should discuss an approach to “minimize disturbance and loss of habitat and incidental take of MGS.”

26. Consider dichotomy between permanent impacts (solar power plant, facilities development, etc.) versus intrusive but temporary impacts (pipelines, fiber optic cable, etc.) Pipelines within the Tortoise Management Area should be revegetated; revegetation in Middle Management Areas would be determined on a case-by-case basis with input from the Implementing Team.

26. Proposed management prescription for the tortoise adopted, unchanged for MGS, except change Tortoise Management Area to MGS Management Area.

27. Rather than focus on what will and will not be allowed, define general criteria: size of development (less than or greater than a certain acreage, permanent versus temporary impacts, single time impacts (e.g., pipeline booster station) versus ongoing impacts (solar plant employing 100 workers) and discuss management prescriptions that would apply.

27. Proposed management prescription for the tortoise adopted, unchanged for MGS.

Associated Threat: Construction Activities

Goal Statement from USFWS/CDFG: Minimize disturbance and loss of habitat and incidental take of tortoises [MGS].

Applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Victorville, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District, Bureau of Land Management.

Non-applicable Jurisdictions: Twentynine Palms, Yucca Valley, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

26. The intent here is to discuss potential differences in mitigation and compensation for permanent versus temporary impacts associated with different project types. For example, the Task Group may decide that temporary impacts associated with linear projects (pipelines, fiber optic cables, etc.) should have a revegetation component in MGS Management Areas but not in areas within the range but outside the management area.

Variable mitigation/compensation measures may be described relative to the following project types: (a) mines, (b) tract home development, (c) new roads and travel ways, (d) pipelines, (e) transmission lines (above-ground, linear projects), (f) fiber optic cables (underground, linear projects), (g) temporary use permits, as for commercial filming, (h) landfills, (i) hazardous waste disposal and clean up, (j) flood control projects, etc. For these examples, a, d, e, f, and g are considered (in the long term) temporary impacts, whereas b, c, h, and j are considered permanent impacts. Could one lower the mitigation fee for temporary impacts but require restoration/revegetation or other on-site mitigation? Should temporary versus permanent impacts be differentiated in MGS Management Areas, with an emphasis on discouraging permanent impacts and minimizing temporary impacts? Relative to linear projects, should even temporary impacts be rerouted around MGS Management Areas?

27. The regulatory agencies agreed that it would be better to define project parameters that would be covered by a 2081 permit or other authorization provided by the plan rather than prohibiting a given development. For example, rather than saying that no mining would be allowed in an MGS Management Area, the plan would indicate that "Mines larger than x acres would not be covered by the plan," or "Pipelines, whenever possible, would be installed next to existing transmission and/or pipelines within MGS Management Areas, and on Bureau of Land Management Lands, must be located within designated utility corridors. Impacts would be compensated at \$x/acre. If the proponent opts to deviate away from an existing corridor, impacts would be mitigated at \$5x/acre and complete revegetation would be required."

Potential Task Group Activities:

(A) Task Group(s) should be designed to ensure that all development interests are represented. Involvement by City and County planners seems essential.

(B) As discussed elsewhere, the variable mitigation/compensation proposals may be discussed relative to management areas rather than project types. Project types would be assigned to either temporary or permanent impacts, the mitigation/compensation prescriptions could be assigned accordingly.

(C) The Task Group should discuss variable mitigation/compensation concepts for specific project types inside and outside MGS Management Areas to facilitate the goal of minimizing or avoiding impacts inside those areas.

28. Plan would develop standard measures for ground-disturbing construction projects, such as (a) pipelines, (b) parcel development, (c) mines, etc.

28. Proposed management prescription for the tortoise adopted, unchanged for MGS.

Associated Threat: Construction Activities

Goal Statement from USFWS/CDFG: Minimize disturbance and loss of habitat and incidental take of tortoises [MGS].

Applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Victorville, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo.

Non-applicable Jurisdictions: Depending on agency adoption (particularly military bases), each jurisdiction (excluding Twentynine Palms, Yucca Valley, Joshua Tree National Park, and Marine Corps Air Ground Combat Center at Twentynine Palms) could adopt the project-specific measures to be delineated by the Team.

Team Recommendations:

28. Under this prescription, the Team would develop standard mitigation measures to be implemented for all different project types expected within the planning area. Standard mitigation measures have been published in several hundred USFWS Biological Opinions. For example, typical mitigation measures for a proposed pipeline may include (a) minimize project impacts to the smallest practical area; (b) an education program will be presented to all construction workers prior to construction to minimize impacts to animals and habitat; (c) all vehicle staging areas will occur in previously disturbed areas or the biological monitor will work with the project supervisor to determine a location that will result in the fewest impacts to animals and their habitat; etc. Whereas most of the measures have been identified for desert tortoises, they are also mostly applicable to MGS (with a few exceptions: MGS would not be moved out of harm's way, nor would "sterile techniques" be required for handling MGS).

Given the structure of the plan with variable management areas, it would be appropriate for the Team to identify pertinent measures for a given management area. For example, (a) full revegetation of a pipeline is required for MGS Management Areas versus (b) revegetation may not be required for projects occurring outside MGS Management Areas (unless prescriptions relative to tortoises require it).

Potential Task Group Activities:

(A) The Team should prepare specific measures for different types of projects and apply those measures to the two different management areas (inside versus outside MGS Management Areas). The Task Group would then review these prescriptions for adoption or modification. It is important that interested parties form the Task Group so that they can lend insight and comment on the formulation and acceptance of these measures.

29. The "West Mojave Implementation Team" would be created to also assist in developing project-specific measures for larger projects in Tortoise Management Area and/or Middle Management Areas and revising standard measures that would be created under the previous bullet (i.e., to help locate a pipeline alignment).

29. The "West Mojave Implementation Team" would be created to also assist in developing project-specific measures for larger projects in MGS Management Areas and revising standard measures that would be created under the previous prescription (i.e., to help locate a pipeline alignment).

30. The Service plans on providing at least two full-time people stationed in Barstow to implement the Plan and assist with and monitor on-the-ground compliance.

30. Proposed management prescription for the tortoise adopted, unchanged for MGS.

31. The Department will consider the feasibility of providing permanent, dedicated position(s) towards implementation of the Plan and on-the-ground compliance.

31. Proposed management prescription for the tortoise adopted, unchanged for MGS.

Associated Threat: Construction Activities

Goal Statement from USFWS/CDFG: Minimize disturbance and loss of habitat and incidental take of tortoises [MGS].

Applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Victorville, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo.

Non-applicable Jurisdictions: Twentynine Palms, Yucca Valley, Joshua Tree National Park, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

29. - 31. The USFWS has confirmed that it will employ two, full-time positions to implement the plan; the CDFG is also considering providing staff. These and other designated individuals would be responsible for reviewing proposed projects (where applicable to ensure that the project fits within the scope of the plan), keeping track of development, the amount of MGS habitat inside and outside management areas affected, and serving as an advisory group to project developers.

Potential Task Group Activities:

(A) A Task Group should discuss the structure, composition, responsibilities, etc. of this Implementing Team. Such a team will likely include a manager, biologists, accounting staff, governmental liaison, compliance officer, etc., the make up of which should be discussed by a Task Group.

32. Consider modifications of open areas: (a) reduce Stoddard Valley and/or Johnson Valley open area(s) to capture High DTEZ (Desert Tortoise Emphasis Zone) areas (north parts of both areas); (b) expansion of Johnson Valley into Cinnamon Hills; (c) expansion of El Mirage boundaries.

32. Consider impacts of applicable open areas, which may include El Mirage, Spangler Hills, and Jawbone Canyon, and determine measures to minimize impacts.

33. If Fort Irwin Expands South: Close and/or reduce Stoddard and Johnson Valley Open Areas.

33. Not Applicable: The southern expansion area is not within the known range of MGS, nor does MGS occur in either of these open areas.

Associated Threat: Off-Highway Vehicles

Goal Statement from USFWS/CDFG: In CD (Tortoise Management Areas) [MGS Management Areas], minimize creation of new roads and trails; rehabilitate closed routes; and enforce use of designated route network. Re-evaluate "best boundaries" of existing OHV management areas to enhance recreation and tortoise [MGS] conservation.

Applicable Jurisdictions: San Bernardino County, Kern County, and Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Twentynine Palms, Victorville, Yucca Valley, Kern County, Los Angeles County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

32. & 33. Although Spangler Hills and Jawbone Canyon Open Areas are near proposed MGS Management Areas, no proposed management area boundaries overlap with open area boundaries, so no open area boundary modifications are expected. Impacts associated with the El Mirage Open Area may affect the Edwards Management Area; similarly, vehicles traveling north out of Jawbone Canyon may affect that proposed management area.

Potential Task Group Activities:

(A) 1998 survey work shows a very high incidence of OHV tracks traveling cross country in areas adjacent to El Mirage Open Area (between El Mirage and Edwards Air Force Base). Through fencing, increased signing, increased ranger patrols, etc. the Task Group(s) should consider measures to reduce this impact, which could affect the Edwards Management Area and management areas in the vicinity of Jawbone Canyon and Spangler Hills.

34. Delete Barstow-to-Vegas race course from the CDCA Plan.

34. Not Applicable: This race corridor is east of the known range of MGS.

Associated Threat: Off-Highway Vehicles

Goal Statement from USFWS/CDFG: In CD (Tortoise Management Areas) [MGS Management Areas], minimize creation of new roads and trails; rehabilitate closed routes; and enforce use of designated route network. Re-evaluate "best boundaries" of existing OHV management areas to enhance recreation *and* tortoise [MGS] conservation.

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

34. None.

Potential Task Group Activities:

(A) None.

35. Consider the rationale for closing/maintaining the Stoddard-to-Johnson Valley corridor.

35. Not Applicable: This race corridor is east of the known range of MGS.

Associated Threat: Off-Highway Vehicles

Goal Statement from USFWS/CDFG: In CD (Tortoise Management Areas) [MGS Management Areas], minimize creation of new roads and trails; rehabilitate closed routes; and enforce use of designated route network. Re-evaluate “best boundaries” of existing OHV management areas to enhance recreation *and* tortoise [MGS] conservation.

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

35. None.

Potential Task Group Activities:

(A) None.

36. Increase ranger patrols in Tortoise Management Area.

36. Increase ranger patrols in MGS Management Areas.

Associated Threat: Off-Highway Vehicles

Goal Statement from USFWS/CDFG: In CD (Tortoise Management Areas) [MGS Management Areas], minimize creation of new roads and trails; rehabilitate closed routes; and enforce use of designated route network. Re-evaluate "best boundaries" of existing OHV management areas to enhance recreation *and* tortoise [MGS] conservation.

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, Joshua Tree National Park, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base.

Team Recommendations:

36. There are currently places, such as between Highway 395 and Helendale, that are proposed as MGS Management Areas that are currently being significantly affected by illegal, off-road vehicle travel (i.e., vehicles traveling cross-country, off existing travel ways). Once prescriptions are in place for MGS Management Areas, increased ranger patrols could be recommended to regulate these impacts. Vandalism, illegal handling, illegal shooting, etc. that mostly affect tortoises are not expected to be a major, adverse effect to MGS, so increased ranger patrols to curb those activities are not likely to benefit MGS as much as they would tortoises.

The Team concurs with agency biologists that ranger patrols, as opposed to law enforcement personnel, are better suited to enforce management prescriptions and inform the public in a meaningful way about resource conservation and the intent behind management prescriptions. Such ranger patrols should be dedicated to protecting biological resources (100% of their time) rather than conducting drug enforcement actions, for example. The Team recommends that several ranger positions be funded by the plan.

Potential Task Group Activities:

(A) The Task Group, comprised of OHV enthusiasts, Bureau of Land Management, and other pertinent jurisdictions and organizations should consider the feasibility and need for increased ranger patrols in MGS Management Areas. Some pertinent questions may include: (a) Should the Bureau of Land Management be responsible for most of the ranger patrols? (b) Are there organizations other than the Bureau of Land Management that should be responsible for ranger patrols? (c) What infrastructure is needed to ensure adequate patrol of MGS Management Areas? (d) What are reasonable fines and/or penalties for violating posted management prescriptions? (e) What signing strategy should be employed to inform the public of legal and illegal uses of vehicles in these protected areas? (f) What are the appropriate duties of law enforcement personnel versus ranger patrol personnel, and should not the latter be exclusively dedicated to enforcing conservation prescriptions and educating the public? etc.

(B) A source of funding for ranger patrols, independent of federal funds appropriated for drug enforcement, should be established to pay the cost of increased patrols.

37. See “non-OHV recreation” for discussion relative to camping.

37. *Unchanged for the MGS.*

Associated Threat: Off-Highway Vehicles

Goal Statement from USFWS/CDFG: In CD (Tortoise Management Areas) [MGS Management Areas], minimize creation of new roads and trails; rehabilitate closed routes; and enforce use of designated route network. Re-evaluate “best boundaries” of existing OHV management areas to enhance recreation *and* tortoise [MGS] conservation.

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base.

Team Recommendations:

37. Specifics relative to camping and other “non-OHV recreation” are discussed under the threat by that same name (see prescriptions 120. to 125.).

Potential Task Group Activities:

(A) Task Group issues are discussed under “non-OHV recreation.”

38. No vehicles off designated routes in the Tortoise Management Area.

38. No vehicles off designated roadways in MGS Management Areas.

Associated Threat: Off-Highway Vehicles

Goal Statement from USFWS/CDFG: In CD (Tortoise Management Areas) [MGS Management Areas], minimize creation of new roads and trails; rehabilitate closed routes; and enforce use of designated route network. Re-evaluate "best boundaries" of existing OHV management areas to enhance recreation *and* tortoise [MGS] conservation.

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base. **Non-applicable Jurisdictions:** Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, Joshua Tree National Park, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

38. The two applicable resource areas of the Bureau of Land Management (i.e., Barstow and Ridgecrest Resource Areas) are identifying a proposed OHV route network for the West Mojave planning area. Implementation of that route network may be determined in a number of ways that have been and are being discussed. Regardless of the final route designation, the Team firmly believes that travel off of designated routes (excepting designated open areas) should not be allowed, as it is contrary to the management prescriptions given elsewhere to manage areas for MGS conservation.

1998 surveys have identified "hot spot" areas where off-highway vehicle, cross-country travel is common. Within the MGS range, the following areas have been identified as problematic for this activity: west and north of Adelanto particularly north of the El Mirage Open Area, west of Helendale, etc.; other areas include the Kramer Hills, areas between Black Mountain and Fremont Peak, north of California City, etc. It is imperative that Task Groups consider ways to keep OHV users on existing roads and discourage them from cross-country travel.

Potential Task Group Activities:

(A) The Task Group must consider means to minimize the incidence of cross-country travel. Examples may include: (a) increased ranger patrols in MGS Management Areas; (b) signing program to encourage use of designated routes; (d) physical barriers or other means to avoid travel on routes designated as closed; etc.

(B) Task Groups will likely discuss the feasibility of managing vehicle use to remain on routes designated as open versus physical closure of routes designated as closed.

(C) It is important that the Task Group be comprised of a wide range of desert users and interest groups to ensure adequate representation by all concerned parties.

39. No racing in the Tortoise Management Area.

39. No racing in MGS Management Areas.

Associated Threat: Off-Highway Vehicles

Goal Statement from USFWS/CDFG: In CD (Tortoise Management Areas) [MGS Management Areas], minimize creation of new roads and trails; rehabilitate closed routes; and enforce use of designated route network. Re-evaluate “best boundaries” of existing OHV management areas to enhance recreation *and* tortoise [MGS] conservation.

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, Joshua Tree National Park, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base.

Team Recommendations:

39. “No racing in MGS Management Areas” refers to sanctioned or otherwise organized races requiring approval of an agency, usually the Bureau of Land Management, for them to occur. Under this prescription, no such races would be allowed in MGS Management Areas. Unlike the similar prescription for tortoises, there may be an opportunity for seasonal closure of such events inside management areas, as MGS are typically active between February and August, when they are most likely to be affected by vehicle collision. Even so, at this time, the agencies recommend that no racing occur in these management areas.

Potential Task Group Activities:

(A) Applicable jurisdictions, particularly the Bureau of Land Management, should comprise a Task Group to determine limitations associated with this prescription. It may be appropriate to discuss alternative events in Bureau of Land Management open areas or seasonal restrictions for such events (i.e., no races between February and August inside management areas).

(B) The Task Group should clearly define and distinguish the differences between “events” and “racing,” and list those racing activities that would be managed under this prescription. A Dual Sport activity (see prescription 40.), for example, is considered an “event” rather than a “race.”

40. Dual Sport events would be allowed year-round in Middle Management Areas and Impacted Habitat Areas, and seasonally in the Tortoise Management Area (Conserved and Protected Habitat Areas); consider summer Dual Sport events in the Tortoise Management Area (remember problems with rain in summer); basically implement Biological Opinion on dual sport events.

40. Dual Sport events would be allowed year-round in non-MGS Management Areas, and only seasonally in MGS Management Areas; consider fall and winter, only, Dual Sport events in MGS Management Areas; the prescriptions given in the Biological Opinion for tortoises on dual sport events may not be applicable to MGS, as these animals have overlapping but different activity patterns.

Associated Threat: Off-Highway Vehicles

Goal Statement from USFWS/CDFG: In CD (Tortoise Management Areas) [MGS Management Areas], minimize creation of new roads and trails; rehabilitate closed routes; and enforce use of designated route network. Re-evaluate "best boundaries" of existing OHV management areas to enhance recreation and tortoise [MGS] conservation.

Applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, California City, Ridgecrest, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District, Bureau of Land Management.

Non-applicable Jurisdictions: State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base.

Team Recommendations:

40. Under this prescription, dual sport events would be allowed throughout the year in non-MGS Management Areas (considering restrictions identified for tortoises or specific jurisdictions, such as military bases), and would have seasonal restrictions in MGS Management Areas. The Team recommends that seasonal restrictions in MGS Management Areas be enforced between February and August, when, during a relatively wet year, MGS would be active and susceptible to vehicle collisions. Such events could be authorized in MGS Management Areas between September and January.

Potential Task Group Activities:

(A) A Task Group should discuss these recommendations and, if necessary, develop alternatives to be considered by the USFWS and CDFG.

41. Limited speed travel on designated, signed routes is allowed in Tortoise Management Area.

41. Limited speed travel on designated, signed routes is allowed in MGS Management Areas.

Associated Threat: Off-Highway Vehicles

Goal Statement from USFWS/CDFG: In CD (Tortoise Management Areas) [MGS Management Areas], minimize creation of new roads and trails; rehabilitate closed routes; and enforce use of designated route network. Re-evaluate "best boundaries" of existing OHV management areas to enhance recreation *and* tortoise [MGS] conservation.

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base. **Non-applicable Jurisdictions:** Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, Joshua Tree National Park, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

41. This recommendation is consistent with other management prescriptions recommended by the USFWS and CDFG for MGS Management Areas.

Potential Task Group Activities:

(A) If necessary, a Task Group should discuss a signing program or other mechanism that would (a) encourage desert users to maintain "limited speed travel" and (b) discuss mechanisms for keeping traffic on signed (or otherwise managed) roads.

42. Implement closure of routes as determined for route designation.

42. Proposed management prescription for the tortoise adopted, unchanged for MGS.

43. If Fort Irwin Expands South: Fewer open routes in CD (Tortoise Management Areas).

43. Not Applicable: The southern expansion area is not within the known range of MGS.

Associated Threat: Off-Highway Vehicles

Goal Statement from USFWS/CDFG: In CD (Tortoise Management Areas) [MGS Management Areas], minimize creation of new roads and trails; rehabilitate closed routes; and enforce use of designated route network. Re-evaluate "best boundaries" of existing OHV management areas to enhance recreation *and* tortoise [MGS] conservation.

Applicable Jurisdictions: Inyo County, Kern County, Los Angeles County, San Bernardino County, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Twentynine Palms, Victorville, Yucca Valley, Indian Wells Valley Water District, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

42. The route designation process is being conducted by the Barstow and Ridgecrest field offices of the Bureau of Land Management, with some input from the public (as with the Ord Mountain Pilot Study). MGS Management Areas, which are being delineated by the Team, will be provided to the Bureau of Land Management to assist them in the route designation planning process.

Potential Task Group Activities:

(A) A Task Group, representing all concerned parties, should be formed to assist the Bureau of Land Management in route designation and related issues.

If Fort Irwin expands to the west, prescription 43 may be applicable.

44. Work with OHV groups (AMA, CORVA, etc.) to establish meaningful education brochures and mechanisms to discourage cross-country travel.

44. Proposed management prescription for the tortoise adopted, unchanged for MGS.

Associated Threat: Off-Highway Vehicles

Goal Statement from USFWS/CDFG: In CD (Tortoise Management Areas) [MGS Management Areas], minimize creation of new roads and trails; rehabilitate closed routes; and enforce use of designated route network. Re-evaluate "best boundaries" of existing OHV management areas to enhance recreation *and* tortoise [MGS] conservation.

Applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Twentynine Palms, Victorville, Yucca Valley, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, Bureau of Land Management, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Non-applicable Jurisdictions: All jurisdictions are applicable in that most, if not all entities, have considered ways to minimize the effects of vehicles off existing travel ways.

Team Recommendations:

44. Given their knowledge and experience with many OHV areas in the desert and elsewhere, AMA, CORVA, Honda Motor Corporation, and other groups should be able to produce meaningful educational materials to make vehicle users aware of the issues affecting the desert. Existing monthly or quarterly newsletters could inform their membership of the planning process and ask for participation in implementing and managing plan prescriptions relative to vehicle use in the desert. Green Sticker money should continue to be used for education and possibly route restoration or trail-use management.

Potential Task Group Activities:

(A) Task Group could discuss (a) mechanisms for encouraging public participation in plan implementation; (b) monitoring program(s) to determine if education is working (i.e., are users staying on roadways?); (c) collecting data in various areas to determine the types of vehicle users in the desert (i.e., to whom should educational materials be sent?); etc.

45. Travel in washes in the Tortoise Management Area and Middle Management Areas is only allowed in those washes that are signed "open."

45. Travel in washes in MGS Management Areas is only allowed in those washes that are signed as "open."

Associated Threat: Off-Highway Vehicles

Goal Statement from USFWS/CDFG: In CD (Tortoise Management Areas) [MGS Management Areas], minimize creation of new roads and trails; rehabilitate closed routes; and enforce use of designated route network. Re-evaluate "best boundaries" of existing OHV management areas to enhance recreation *and* tortoise [MGS] conservation.

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, Joshua Tree National Park, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

45. The Team strongly recommends that prescription 45. replace those identified in the California Desert Conservation Area Plan, which state that wash travel will be governed by the designation for the area (e.g., "closed," "open," etc.). For "limited areas," vehicle travel will be restricted to "existing" (Class M) or "approved" (Class L) routes of travel. Washes as access routes may have some type of travel limitation (e.g., speed limits, seasonal closure, etc.) imposed to protect the resource values found in or along the wash. The three applicable military bases are also asked to consider this prescription.

Potential Task Group Activities:

(A) The Team expects that this issue will be discussed by a Task Group represented by all concerned interests.

46. See "Subsidized Predation" (prescriptions 113. And 114.) for additional measures pertinent to landfills.

47. No new landfills in or within five miles of the Tortoise Management Area because ravens eat juvenile tortoises and Dr. Boarman's research shows that ravens travel up to five miles from landfills for food.

48. The effects of an expanded Barstow Landfill on the adjacent Conserved Habitat Area needs to be discussed.

46., 47., & 48. Not Applicable: Landfills, transfer stations, and subsidized predation are considered threats to tortoises, relative to increases in raven numbers and subsequent, potential increased predation on juveniles. There have been no studies showing raven predation of MGS.

Associated Threat: Landfills and Transfer Stations

Goal Statement from USFWS/CDFG: Minimize availability of food provided by landfills to minimize increase of ravens in the West Mojave planning area.

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

46., 47. & 48. None.

Potential Task Group Activities:

(A) None.

49. Landfill and transfer station management must conform to the standards currently implemented by San Bernardino County at landfills such as Victorville, Newberry Springs, Phelan, and Barstow.

50. Eliminate "do-it-yourself" dumpster centers.

51. Be sure that dumpsters have self-closing lids.

52. Ensure that landfill operations do not encourage illegal dumping; free dumping available to local residents? Receptacles at landfills to receive after-hours refuse? Extended operating hours in the evening to accommodate refuse?

49., 50., 51., & 52. Not Applicable: Landfills, transfer stations, and subsidized predation are considered relative to increases in raven numbers and subsequent, potential increased predation on juveniles. There have been no studies showing raven predation of MGS.

Associated Threat: Landfills and Transfer Stations

Goal Statement from USFWS/CDFG: Minimize availability of food provided by landfills to minimize increase of ravens in the West Mojave planning area.

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

49. - 52. None.

Potential Task Group Activities:

(A) None.

53. Have military create analogous Tortoise Management Area boundaries: (a) try to match up inside boundaries with those designated outside; (b) show China Lake's Tortoise Management Area; (c) review Edwards' INRMP; etc.

53. Request (with help from the Team if asked) military bases to create analogous MGS Management Areas on Edwards Air Force Base, China Lake Naval Air Weapons Station, and Fort Irwin (including Goldstone Deep Space Communications Complex): (a) try to match up inside boundaries with those designated outside; (b) show China Lake's Tortoise Management Area; (c) review Edwards' INRMP; etc

54. Modify, as necessary, protection provided by INRMPs, Biological Opinions, etc. to ensure compatibility with other plan prescriptions.

54. Applicable management prescriptions given in military INRMPs, Biological Opinions, etc. that would result in the conservation of MGS should be adopted and endorsed by the West Mojave Plan; specific MGS Management Area boundaries should be delineated for Edwards, China Lake, and Fort Irwin for which those management prescriptions would apply.

55. The Team could work with each base to determine Impacted Habitat Areas, Middle Management Areas, and The Tortoise Management Area to be managed accordingly by existing or new management prescriptions.

55. This prescription is covered by 53. & 54., above.

Associated Threat: Military Operations

Goal Statement from USFWS/CDFG: Establish guidelines for operations that are compatible with recovery [conservation] of the desert tortoise [MGS]. Develop CD (Tortoise Management Areas) [MGS Management Areas] boundaries within each base that compliment those outside.

Applicable Jurisdictions: China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Twentynine Palms, Victorville, Yucca Valley, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, Bureau of Land Management, Marine Corps Air Ground Combat Center at Twentynine Palms, Marine Corps Logistics Base at Nebo/Yermo.

Team Recommendations:

53. - 55. The Team has already met collectively with the environmental managers of the five military installations (PACIDERM) and individually with Edwards Air Force Base, China Lake, and Fort Irwin. The Team has an understanding with Edwards that the base is managing natural resources under existing Biological Opinions and that a draft Integrated Natural Resource Management Plan (INRMP) has been submitted to the USFWS and CDFG for review and comment. The draft INRMP identifies areas, comprising most of Edwards' undeveloped lands (i.e., excluding cantonment areas, military research areas, etc.) for resource management. The Team recommends adoption of the management prescriptions set forth in Edwards' INRMP and designation of appropriate areas as an "Edwards Management Area," which will likely correspond with areas identified in the INRMP. China Lake's and Fort Irwin's analogous documents have yet to be completed, although both installations are also functioning, in part, under Biological Opinions issued by the USFWS.

The Team needs to complete review of the available INRMP's and other management plans to see if they are complimentary to the management prescriptions being developed for public and private lands outside the bases, on adjacent lands. At this time (pending further review) it appears that the plans for Edwards and China Lake will be compatible; Team review is still required for Fort Irwin's analogous plan, which is incomplete and unavailable at this time.

Potential Task Group Activities:

(A) The Task Group should be comprised of pertinent base personnel and Team members to facilitate complimentary management prescriptions inside and outside base boundaries. Other public involvement is yet to be determined.

56. Develop specific mitigation measures for specific project types (pipelines, road-widening, etc.) that would be used inside and outside the bases.

56. Proposed management prescription for the tortoise adopted, unchanged for MGS.

Associated Threat: Military Operations

Goal Statement from USFWS/CDFG: Establish guidelines for operations that are compatible with recovery [conservation] of the desert tortoise [MGS]. Develop CD (Tortoise Management Areas) [MGS Management Areas] boundaries within each base that compliment those outside.

Applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Victorville, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management.

Non-applicable Jurisdictions: Marine Corps Air Ground Combat Center at Twentynine Palms, Twentynine Palms, Yucca Valley, Joshua Tree National Park.

Team Recommendations:

56. With a few modifications relative to base management, the following discussion is a reiteration of prescription 28:

Under prescription 56, the Team would develop standard mitigation measures to be implemented for all different project types expected within the planning area; the bases could adopt these measures. Standard mitigation measures have been published in several hundred USFWS Biological Opinions. For example, typical mitigation measures for a proposed pipeline may include (a) minimize project impacts to the smallest practical area; (b) an education program will be presented to all construction workers prior to construction to minimize impacts to animals and habitat; (c) all vehicle staging areas will occur in previously disturbed areas or the biological monitor will work with the project supervisor to determine a location that will result in the fewest impacts to animals and their habitat; etc.

Given the structure of the plan relative to MGS and the effect of base management plans on MGS protection, the Team needs to review management plans to see if they are consistent with prescriptions given outside bases. Some of the MGS polygons are proposed inside and outside a given military base, so it is important that management within a given polygon be consistent among the affected jurisdictions

Potential Task Group Activities:

(A) Once this analysis is complete, the Team will provide project-specific measures to the military bases for their consideration and potential adoption. Military management plans will be used extensively to develop these protective measures.

57. If Fort Irwin Expands South: There should be compensation for lost habitat: (a) acquisition of private lands; reducing size(s) of open area(s);

58. tortoises may need to be translocated out of harm's way;

59. fencing of Fort Irwin boundaries and roads;

60. maintain corridor(s) to connect Cronese tortoises with those to the west;

61. increase ranger patrols in the Tortoise Management Area elsewhere (closed portions of open areas?); and

62. fund (some portion or all of) signing and education relative to tortoise recovery.

57 - 62. Not Applicable: The southern expansion area is not within the known range of MGS.

Associated Threat: Military Operations

Goal Statement from USFWS/CDFG: Establish guidelines for operations that are compatible with recovery [conservation] of the desert tortoise [MGS]. Develop CD (Tortoise Management Areas) [MGS Management Areas] boundaries within each base that compliment those outside.

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

57. - 62. None.

Potential Task Group Activities:

(A) None.

If Fort Irwin expands to the west, these prescriptions may be applicable.

63. Fence 395 from Shadow Mountain Road to Red Mountain (and north of there?); may also consider parts of Highway 58 not currently fenced.
64. Fence both sides of Irwin Road and Fort Irwin Road.
65. Consider fencing from Helendale to just south of Lenwood (National Trails Highway).
66. Do not fence 247 from Lucerne to Barstow to avoid fragmenting a relatively small population and ADT may not warrant fencing.
67. Consider fencing south side of I-40 from Barstow to Camp Rock Road.
68. If Fort Irwin Expands South: If expansion, the Army would fence east side of Fort Irwin Road and all of Irwin Road.
69. Implement a mechanism that will allow fencing on currently unpaved roads should ADTs increase to the point that traffic becomes a problem: Helendale Road, Randsburg-Mojave Road.
70. Develop criteria to determine future needs for fencing: e.g., 500 to 1,000 ADT, dependent on tortoise densities in adjacent areas; insofar as possible, do not fragment the Tortoise Management Area by running fences through the center of them.
71. A maintenance schedule must be developed to maintain fence integrity and effectiveness.
72. Maintenance operators should be aware of tortoises and avoid them; seasonal restrictions may be appropriate (late fall and winter may be the best time for these activities); any such measures would consider roads on a case-by-case basis and be dependent on tortoise densities in the area or adjacent management areas; these or other measures to avoid the need for a biological monitor are advisable.
73. As far as possible, road beds should not be lowered and berms should not exceed 12 inches or a slope of 30°, for example. Helendale Road, Fossil Bed Road, Camp Rock Road, and Copper City Road were identified as particular problems. Consider alternatives to grading, such as chain drag.
74. Culverts are necessary where fencing would permanently fragment tortoise habitat; studies should determine more about spacing, and design and monitoring should be implemented to see if there is a need to manually translocate tortoises.
75. Consider feasibility (cost, use by tortoises, maintenance, etc.) of overpasses compared to underpasses.
76. Culverts need to be maintained on a regular basis to facilitate tortoise use.
77. New roads or railroads must implement designs, maintenance, etc. that are consistent with the terms identified for existing roads; locations of such roads must consider reserve design relative to the Tortoise Management Area and other factors.
78. Consider speed regulators (speed bumps, signs, etc.) to further reduce speeds on unfenced roads.

63. - 78. May not be applicable: Proposed fencing and culverts along roads are intended to benefit tortoises, not MGS. On the other hand, Boarman's work along Highway 58 shows that all vertebrate species, which would presumably include MGS, may be benefitted by fence installation. In any case, the original purpose of fencing roads was to protect tortoises, so fencing is not considered to be applicable to MGS management.

Associated Threat: Roads, Highways, and Railroads

Goal Statement from USFWS/CDFG: Minimize the direct and indirect impacts of paved roads and railroads on tortoises [MGS] and tortoise [MGS] habitat.

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

63. - 78. None.

Potential Task Group Activities:

(A) None.

79. Require pre-disturbance, removal surveys for tortoises in the Tortoise Management Area.

79. Under the proposed conservation strategy, CDFG would not require Cumulative Human Impact Evaluation Forms (CHIEFs) to be completed, nor would trapping be required. A brief site visit to determine if compensable habitat would be lost to a given project may be required (see prescription 5.) (This prescription is taken, verbatim, from prescriptions 18., 19., 21., & 23.).

Associated Threat: Agriculture

Goal Statement from USFWS/CDFG: Establish guidelines for agriculture that are compatible with recovery [conservation] of the desert tortoise [MGS]. Institute a mitigation fee program that partially funds recovery [conservation].

Applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Victorville, Bureau of Land Management, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District.

Non-applicable Jurisdictions: Twentynine Palms, Yucca Valley, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

79. The Team's recommendations are given in prescriptions 18., 19., 21., & 23., which are reiterated as follows: "Under the current management situation, a habitat analysis is required, including a data base search, to determine if MGS may be affected by a given project. CHIEFs (see prescription, above) are no longer used; trapping may be required on a case-by-case basis if the proponent does not choose to assume MGS presence and pay applicable fees. As per prescription 5., there may be certain sites for which project development will not require mitigation. If this prescription is applicable to MGS, a site visit may be required to determine if the project is exempt from mitigation fees or not. Such surveys would not be required for jurisdictions outside the range (particularly Twentynine Palms and Yucca Valley).

"Under the proposed scenario, no trapping would be required for any projects, instead the proponent would pay the applicable fee to compensate impacts. We expect a dichotomy in the fee structure: inside versus outside MGS Management Areas, with fees being relatively higher inside the management area. For many proponents, this scenario would be much less costly than trapping, and the uncertainty of paying mitigation fees in addition to trapping fees would no longer be a problem."

Potential Task Group Activities:

(A) As necessary, the Task Group should discuss this approach or an alternative. Fee structure, nexus, etc. are discussed in several prescriptions, including 3., 4., 5., etc.

80. Loss of native habitat to new agriculture in the planning area would be compensated by paying appropriate fees, restoring appropriate agricultural areas, or implementing other, appropriate compensation measures.

80. Loss of native habitat to new agriculture in MGS Management Areas would be compensated by paying appropriate fees, restoring appropriate agricultural areas, or implementing other, appropriate compensation measures.

Associated Threat: Agriculture

Goal Statement from USFWS/CDFG: Establish guidelines for agriculture that are compatible with recovery [conservation] of the desert tortoise [MGS]. Institute a mitigation fee program that partially funds recovery [conservation].

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

80. This prescription would only be applicable to MGS Management Areas where agriculture is likely to occur (which excludes military bases from consideration). Given the importance of the MGS Management Areas to ground squirrel conservation, the Team considers fees (or other alternatives, such as restoring habitat elsewhere in MGS Management Areas) for agricultural development to be warranted.

Potential Task Group Activities:

(A) Discuss as necessary, and be sure that appropriate jurisdictions (mostly County planners) are involved.

81. Pertinent measures identified under “construction activities” would be moved to this section.

81. This prescription is redundant with prescription 28., which is as follows: “Plan would develop standard measures for ground-disturbing construction projects, such as (a) pipelines, (b) parcel development, (c) mines, etc.”

Associated Threat: Agriculture

Goal Statement from USFWS/CDFG: Establish guidelines for agriculture that are compatible with recovery [conservation] of the desert tortoise [MGS]. Institute a mitigation fee program that partially funds recovery [conservation].

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

81. The Team’s recommendations are given in prescription 28., which is stated as: “Under this prescription, the Team would develop standard mitigation measures to be implemented for all different project types expected within the planning area. Standard mitigation measures have been published in several hundred USFWS Biological Opinions. For example, typical mitigation measures for a proposed pipeline may include (a) minimize project impacts to the smallest practical area; (b) an education program will be presented to all construction workers prior to construction to minimize impacts to animals and habitat; (c) all vehicle staging areas will occur in previously disturbed areas or the biological monitor will work with the project supervisor to determine a location that will result in the fewest impacts to animals and their habitat; etc. Whereas most of the measures have been identified for desert tortoises, they are also mostly applicable to MGS (with a few exceptions: MGS would not be moved out of harm’s way, nor would “sterile techniques” be required for handling MGS).

“Given the structure of the plan with variable management areas, it would be appropriate for the Team to identify pertinent measures for a given management area. For example, (a) full revegetation of a pipeline is required for MGS Management Areas versus (b) revegetation may not required for projects occurring outside MGS Management Areas (unless prescriptions relative to tortoises require it).”

Potential Task Group Activities:

(A) The Team will prepare specific measures for different types of projects and apply those measures to the two different management areas (inside versus outside MGS Management Areas). The Task Group would then review these prescriptions for adoption or modification. It is important that interested parties form the Task Group so that they can lend insight and comment on the formulation and acceptance of these measures.

82. Contingent corridors, identified in the CDCA Plan, will not be activated within the Tortoise Management Area.

82. Contingent corridors, identified in the CDCA Plan, will not be activated within MGS Management Areas.

Associated Threat: Utility Corridors

Goal Statement from USFWS/CDFG: Minimize direct impacts associated with construction and maintenance of utility corridors and indirect impacts associated with their presence (raven nesting, etc.).

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

82. This prescription is mostly applicable to the Bureau of Land Management, where the 1980 CDCA Plan identified contingent corridors. Under this prescription, contingent corridors running through MGS Management Areas would not be activated. Although one major impact of new utility corridors, with regards to tortoises, may be increased opportunities for raven nesting and concomitant predation on juveniles, the Team considers that creation of a new utility corridor through MGS Management Areas would constitute unacceptable habitat fragmentation of the affected management area. Increased vehicle collisions, further introduction of non-native weeds, potential increases in fire, new vehicle access, etc. would each contribute to fragmenting habitat that, without contingent corridor activation, would not likely occur.

Potential Task Group Activities:

(A) Pertinent Bureau of Land Management personnel should review this proposed prescription with the Team and other concerned entities (Edison, gas companies, etc.) for feasibility.

83. For distribution lines, the poles should be designed to reduce potential for raven nesting (absence of two parallel cross-arms; a single cross-arm is preferred; inverted "V" shape?).

84. Where possible, solid-bodied transmission towers should be used instead of lattice-bodied towers to minimize raven nesting opportunities.

85. Not necessary to require anti-perch structures on transmission lines. After obtaining applicable salvage permits, a mechanism should be established for the proponent to implement monitoring and removal of raven nests from the Tortoise Management Area.

83. - 85. Not Applicable: These prescriptions are relative to potential increases in raven predation on juvenile tortoises, where raven predation of MGS has not been documented.

Associated Threat: Utility Corridors

Goal Statement from USFWS/CDFG: Minimize direct impacts associated with construction and maintenance of utility corridors and indirect impacts associated with their presence (raven nesting, etc.).

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

83., 84., & 85. None.

Potential Task Group Activities:

(A) None.

86. Within the Tortoise Management Area (and maybe Middle Management Areas), prescriptions identified for public lands (Bureau of Land Management) should be the same as on private lands (e.g., if required, revegetation would occur on both public and private portions of a given pipeline).

86. Within MGS Management Areas, prescriptions identified for public lands (Bureau of Land Management) should be the same as on private lands (e.g., if required, revegetation would occur on both public and private portions of a given pipeline).

Associated Threat: Utility Corridors

Goal Statement from USFWS/CDFG: Minimize direct impacts associated with construction and maintenance of utility corridors and indirect impacts associated with their presence (raven nesting, etc.).

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

86. The intent here is to ensure that project proponents are treated equally, insofar as possible, for project development on public versus private lands. "Standard mitigation measures" discussed relative to several different threats, would help to ensure that this prescription is implemented.

Potential Task Group Activities:

(A) None?

87. Maintenance of existing utilities is allowed and will require minimization of impacts to tortoises and habitat; all maintenance will remain on existing access roads except for the point location of maintenance-related disturbance.

87. Maintenance of existing utilities is allowed and will require minimization of impacts to MGS and habitat; all maintenance will remain on existing access roads except for the point location of maintenance-related disturbance.

88. Support CDCA designation and use restrictions (see current management below) for utility corridors.

88. Proposed management prescription for the tortoise adopted, unchanged for MGS.

Associated Threat: Utility Corridors

Goal Statement from USFWS/CDFG: Minimize direct impacts associated with construction and maintenance of utility corridors and indirect impacts associated with their presence (raven nesting, etc.).

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

87. & 88. These standard requirements are part of the Current Management Situation for Edison and other utility companies, and would be a future requirement of maintenance activities for new and existing utility lines. In stating the above prescription, the agencies are endorsing existing regulations (CDCA Plan) for utility corridors, which are listed below: (a) minimize the number of separate rights-of-way by utilizing existing rights-of-way as a basis for planning corridors; (b) encourage joint use of corridors for transmission lines, canals, pipelines, and cables; (c) provide alternative corridors to be considered during processing of applications; (d) avoid sensitive resources whenever possible; (e) conform to local plans whenever possible; (f) consider wilderness values and be consistent with final wilderness recommendations; (g) complete the delivery-systems network; (h) consider on-going projects for which decisions have been made, for example, the Intermountain Power Project; and (i) consider corridor networks which take into account power needs and alternative fuel resources.

Potential Task Group Activities:

(A) None?

89. All pipeline alignments should be revegetated; narrowing the ROW impact is best.

90. Within existing corridors, attempt to use areas that are already disturbed rather than disturbing new areas within the two to three mile corridor.

89. & 90. Proposed management prescription for the tortoise adopted, unchanged for MGS.

Associated Threat: Utility Corridors

Goal Statement from USFWS/CDFG: Minimize direct impacts associated with construction and maintenance of utility corridors and indirect impacts associated with their presence (raven nesting, etc.).

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

89. & 90. These prescriptions follow current management where most (or all) temporary impacts associated with construction of linear projects (pipelines, underground cables, transmission lines, etc.) must be minimized through revegetation. Where possible, it is best to use areas of existing disturbance that have not been revegetated for the right-of-way (shoulders of existing, paved roads are an excellent example). There is still a wide range of revegetation measures that can be discussed: ground scarification (usually imprinting) with and without seed; imprinting with one versus many species of seeds; imprinting with and without mycorrhizal inoculation; etc. Whereas the Team concurs that revegetation is appropriate in MGS Management Areas, it would be appropriate to have pertinent experts develop a standard revegetation protocol to be implemented by the plan.

Potential Task Group Activities:

(A) With guidance from the Team, a Task Group of concerned public (particularly County and City planners) should meet with recognized revegetation experts (Tom Egan of the Bureau of Land Management, David Bainbridge of San Diego State University, etc.) to develop a standard revegetation protocol applicable to all or some management areas.

91. Wildland fire management is allowed in all management areas.

91. Wildland fire management is allowed in MGS Management Areas.

92. Fire suppression will be a mix of aerial attack with fire retardant; crews using hand tools to create firebreaks; mobile attack engines limited to public roads and designated open routes.

92. Proposed management prescription for the tortoise adopted, unchanged for MGS.

93. Use of earth-moving equipment or vehicle travel off public roads and designated open routes would not be allowed except in critical situations where needed to protect life and property.

93. Proposed management prescription for the tortoise adopted, unchanged for MGS.

94. Incoming fire crews unfamiliar with tortoise protection should receive tortoise awareness program to minimize impacts.

94. Incoming fire crews unfamiliar with habitat protection should receive an awareness program to minimize impacts.

95. Post-suppression mitigation would include rehabilitation of firebreaks and other ground disturbances using methods compatible with management goals.

95. Proposed management prescription for the tortoise adopted, unchanged for MGS.

96. (Optional: Call Steve Johnson, Todd Esque, etc. about effects of fire, management, etc.)

96. Proposed management prescription for the tortoise adopted, unchanged for MGS.

Associated Threat: Fire

Goal Statement from USFWS/CDFG: Minimize disturbance related to fires and suppression.

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

91. - 96. The Bureau of Land Management currently fights wildland fires under prescriptions that were formulated, in part, to minimize impacts to biological resources. If not already, these guidelines should be made available to County and City jurisdictions to ensure consistency, where applicable, in fire suppression activities. Suppression activities in MGS Management Areas should be somewhat more restrictive and resource protective than those outside MGS Management Areas. It appears that current management for the Bureau of Land Management has already considered means to reduce resource damage during fire fighting activities. The current situation for private fire stations is unknown.

Potential Task Group Activities:

(A) If necessary, fire management organizations could meet to discuss variable approaches to fighting fire in different management zones. A standard set of guidelines could be developed to minimize impacts to biological resources during and after fire suppression activities. These guidelines would be adopted by all applicable, private and federal fire departments.

(B) Experts on fire suppression (Todd Esque of USGS-BRD, Tim Duck of Arizona Strip District of Bureau of Land Management, etc.) could be asked to review any guidelines that may be developed by such a Task Group.

97. There should be no sheep grazing in the Tortoise Management Area.

97. There should be no sheep grazing in MGS Management Areas.

Associated Threat: Livestock Grazing

Goal Statement from USFWS/CDFG: Establish and implement grazing management that is consistent with tortoise recovery [MGS conservation].

Applicable Jurisdictions: MGS Management Area portions of California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

97. Most sheep grazing was eliminated from Category I and II habitat by the Bureau of Land Management in the early 1990's. Spring and summer 1998 surveys confirmed that there has been no recent sheep grazing in most of these areas. Sheep grazing still occurs in many places, outside Category I and II habitat, that are proposed for MGS Management Areas. The agencies recommend that sheep grazing in MGS Management Areas be eliminated from Bureau of Land Management lands and private lands (if that can be enforced).

Potential Task Group Activities:

(A) The Task Group should consider elimination of sheep grazing from proposed MGS Management Areas, including the newly established Golden Valley Wilderness Area located east of Red Mountain.

98. Plan will provide mechanism for voluntary retirement of cattle allotments from inside the Tortoise Management Area.

98. Plan will provide mechanism for voluntary retirement of cattle allotments from inside MGS Management Areas.

Associated Threat: Livestock Grazing

Goal Statement from USFWS/CDFG: Establish and implement grazing management that is consistent with tortoise recovery [MGS conservation].

Applicable Jurisdictions: Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Twentynine Palms, Victorville, Yucca Valley, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

98. The Plan should recognize the retirement/reuse of the Pilot Knob Allotment from cattle grazing use to conservation use and allow for similar, voluntary transactions in the future. The only cattle allotments remaining in the range of Mohave ground squirrel are the Harper Lake Allotment, allotments west of Highway 14 in the Sierra foothills, and an allotment in the Coso Range **this needs to be confirmed with the resource areas, particularly Ridgecrest**. The Team still needs to identify allotments that coincide with proposed management areas.

Unlike sheep grazing, where there are, for example, obvious type conversions of habitat from high to low diversity, perennial shrub cover, the effects of cattle grazing on MGS population dynamics are less clear **can Leitner add anything to this?** The plan will proposed various sites to study the ecology of MGS during drought and non-drought years, for example, patterned after Leitner's studies in the Coso Range. It is appropriate that study sites occur in areas that are and are not being grazed. The Plan needs to have an adaptive management component that would allow changes in cattle grazing, modification of MGS Management Area boundaries, etc. based on the information that is derived from scientific study. The Team will identify appropriate study sites during the planning process, ensuring that cattle grazed versus non-grazed areas are considered in the study design.

Potential Task Group Activities:

(A) Task Group should discuss the feasibility of this prescription.

99. Above-ground biomass of forage (currently based only on 40% consumption rate of new perennial growth) should be measured to determine adaptive prescriptions for cattle grazing; the best time to do this is from March through early June.

100. In the Tortoise Management Area there should be monitoring of both annual and perennial vegetation; when certain thresholds are met for either annual and/or perennial plants, cows should be removed: remove cows when annual plant biomass falls below 350 lbs/acre between March and June.

99. & 100. Not Applicable: These thresholds have been designed relative to the desert tortoise. There is insufficient information to determine if such prescriptions are also applicable or beneficial to MGS.

Associated Threat: Livestock Grazing

Goal Statement from USFWS/CDFG: Establish and implement grazing management that is consistent with tortoise recovery [MGS conservation].

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

99. & 100. These measures represent the current management situation for cattle grazing in the West Mojave, but are not being applied for MGS management.

Potential Task Group Activities:

(A) None?

101. Applicable measures given in “construction activities” should be moved to this section for range improvements.

101. Proposed management prescription for the tortoise adopted, unchanged for MGS.

Associated Threat: Livestock Grazing

Goal Statement from USFWS/CDFG: Establish and implement grazing management that is consistent with tortoise recovery [MGS conservation].

Applicable Jurisdictions: Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Ridgecrest, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nemo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

101. This prescription relates to the construction and maintenance of range improvements for cattle, and does not therefore include all measures that would be developed for prescriptions 28. and 81. Specific restrictions, guidelines, etc. identified for certain construction activities and applicable management areas should be considered relative to construction of range improvements in certain allotments. These are relatively general (as compared to the measures that will be developed for “Construction Activities”), and could include measures such as: while constructing new range improvements, areas should be chosen to minimize impacts to MGS habitat; cattle use should be managed to avoid impacts to MGS habitat, such as selective rotation and avoidance of concentration areas (watering areas, etc.) that would impact new MGS habitat; etc. Once identified, the Team should ensure that any Task Group organized to discuss grazing issues should have copies of the prescriptions relating to new construction to determine those measures that may be applicable to MGS Management Areas.

Potential Task Group Activities:

(A) The Task Group, with help from the Team, should review existing cattle management prescriptions and identify specific measures for range improvements within MGS Management Areas. It is important that interested parties from the Task Group be involved so that they can lend insight and comment on the formulation and acceptance of these measures.

102. Cattle grazing may occur in certain portions of the Tortoise Management Area with adaptive prescriptions that protect tortoises (e.g., variable management during drought years).

102. Cattle grazing may occur in MGS Management Areas with adaptive prescriptions that protect animals and habitat (e.g., variable management during drought years).

Associated Threat: Livestock Grazing

Goal Statement from USFWS/CDFG: Establish and implement grazing management that is consistent with tortoise recovery [MGS conservation].

Applicable Jurisdictions: Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Twentynine Palms, Victorville, Yucca Valley, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

102. No specific measures were determined by the regulatory agencies. One example mentioned, was minimizing grazing of cattle in MGS Management Areas during drought (although this action may effectively be part of current management, where cattle are not grazed during drought years because forage biomass thresholds are not being attained).

Potential Task Group Activities:

(A) The Task Group should discuss potential changes in current management to ensure that grazing within MGS Management Areas is consistent with the management prescriptions identified elsewhere in this analysis. Some pertinent questions may include: Should cattle grazing be reduced (or eliminated) in certain areas during drought years? Should some areas (or entire allotments) be changed from permanent to ephemeral status? Which studies (similar to those conducted by Dr. Leitner) should be completed in the West Mojave (particularly west of Highway 14, in the Sierra foothills) to test the effects of cattle grazing on MGS? (Dr. Leitner should be consulted on this question).

103. Supplemental feed (hay, alfalfa, etc.) and food supplements (nitrogen supplements like molasses) should not be allowed in the Tortoise Management Area.

103. Supplemental feed (hay, alfalfa, etc.) and food supplements (nitrogen supplements like molasses) are not allowed in MGS Management Areas).

Associated Threat: Livestock Grazing

Goal Statement from USFWS/CDFG: Establish and implement grazing management that is consistent with tortoise recovery [MGS conservation].

Applicable Jurisdictions: Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Twentynine Palms, Victorville, Yucca Valley, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

103. Dr. Hal Avery indicated that use of such materials effectively increases the appetites of cattle and may result in more impacts to native plant species than would occur without the use of these supplements. The Team should ascertain if current management allows use of food supplements; if they are, they may need to be eliminated from MGS Management Areas; if not, no modifications are necessary.

Potential Task Group Activities:

(A) Could be discussed if this is an issue.

104. The rancher shall contact the BLM for range improvements requiring off-road use of equipment; routine maintenance shall be restricted to existing roads; unreported off-road travel is authorized to remove cattle carcasses.

105. Herding of cattle shall be minimized, and cattle allowed to disperse throughout the area of use.

104. & 105. Proposed management prescription for the tortoise adopted, unchanged for MGS.

Associated Threat: Livestock Grazing

Goal Statement from USFWS/CDFG: Establish and implement grazing management that is consistent with tortoise recovery [MGS conservation].

Applicable Jurisdictions: Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Twentynine Palms, Victorville, Yucca Valley, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

104. & 105. The Team understands that these prescriptions are part of current management and should be continued under authorization of the West Mojave Plan.

Potential Task Group Activities:

(A) None?

106. Pertinent measures identified for "Landfills and Transfer Stations" (prescriptions 47. and 48.) would apply to this threat.

106. Not Applicable: Landfills, transfer stations, and subsidized predation are considered threats to tortoises, relative to increases in raven numbers and subsequent, potential increased predation on juveniles. There have been no studies showing raven predation of MGS.

Associated Threat: Subsidized Predation

Goal Statement from USFWS/CDFG: Minimize/reduce subsidized predators from habitats managed for tortoises [MGS] (CD (Tortoise Management Areas) [MGS Management Area] first, then into middle management zone (Middle Management Areas) [Not Applicable].

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

106. None.

Potential Task Group Activities:

(A) None.

107. Eliminate feral dog packs from the Tortoise Management Area first, then Middle Management Areas.

107. Not Applicable: There is nothing in the literature to indicate that feral dog packs impact MGS. As such, this management prescription is not recommended for MGS Management Areas.

Associated Threat: Subsidized Predation

Goal Statement from USFWS/CDFG: Minimize/reduce subsidized predators from habitats managed for tortoises [MGS] (CD (Tortoise Management Areas) [MGS Management Area] first, then into middle management zone (Middle Management Areas) [Not Applicable].

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

107. None.

Potential Task Group Activities:

(A) None.

108. Dogs off-leash would be allowed in all areas.

108. Proposed management prescription for the tortoise adopted, unchanged for MGS.

Associated Threat: Subsidized Predation

Goal Statement from USFWS/CDFG: Minimize/reduce subsidized predators from habitats managed for tortoises [MGS] (CD (Tortoise Management Areas) [MGS Management Area] first, then into middle management zone (Middle Management Areas) [Not Applicable].

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

108. Although the Desert Tortoise (Mojave Population) Recovery Plan recommended “No uncontrolled dogs out of vehicles” and Draft 3 stated “Dogs off leash are not allowed in core reserves or managed-use zones and are allowed in release zones,” the agencies concurred that pet animals accompanying their owners into the desert do not represent a significant threat to MGS conservation; hence this prescription.

Potential Task Group Activities:

(A) None?

109. A raven control program should be considered in some capacity in the Tortoise Management Area and Middle Management Areas, but not Impacted Habitat Areas; the program should target only those ravens that are preying on tortoises; wholesale eradication without evidence of predation may be possible in specific areas (raven removal zones) and may be seasonal (March to June and September and October). Another alternative may be "nest management;" replacing real eggs with fake eggs, remove nests, etc.

109. Not Applicable: Ravens are considered a threat to juvenile tortoises, not MGS. There have been no studies showing raven predation of MGS, therefore this prescription is not considered applicable to MGS.

Associated Threat: Subsidized Predation

Goal Statement from USFWS/CDFG: Minimize/reduce subsidized predators from habitats managed for tortoises [MGS] (CD (Tortoise Management Areas) [MGS Management Area] first, then into middle management zone (Middle Management Areas) [Not Applicable].

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

109. None.

Potential Task Group Activities:

(A) None.

110. Investigate and eliminate miscellaneous anthropogenic sources of raven food (spilled grain from trains, sewage ponds, etc.).

111. Jurisdictions will enforce removal and proper disposal of dead farm animals (chickens, cattle, etc.) from rearing facilities. "Proper disposal" does not include dumping them at landfills; animals should be buried, rendered, etc.

110. & 111. Not Applicable: Ravens are considered a threat to juvenile tortoises, not MGS. There have been no studies showing raven predation of MGS, therefore this prescription is not considered applicable to MGS.

Associated Threat: Subsidized Predation

Goal Statement from USFWS/CDFG: Minimize/reduce subsidized predators from habitats managed for tortoises [MGS] (CD (Tortoise Management Areas) [MGS Management Area] first, then into middle management zone (Middle Management Areas) [Not Applicable].

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

110. & 111. None.

Potential Task Group Activities:

(A) None.

112. Avoid creating new nest substrates in areas where few currently exist; do not establish new utility corridors that would provide significant, new nesting opportunities.

112 Not Applicable: Ravens are considered a threat to juvenile tortoises, not MGS. There have been no studies showing raven predation of MGS, therefore this prescription is not considered applicable to MGS.

Associated Threat: Subsidized Predation

Goal Statement from USFWS/CDFG: Minimize/reduce subsidized predators from habitats managed for tortoises [MGS] (CD (Tortoise Management Areas) [MGS Management Area] first, then into middle management zone (Middle Management Areas) [Not Applicable].

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

112. None. Although prescription 82. indicates that contingent corridors should not be activated through MGS Management Areas.

Potential Task Group Activities:

(A) None.

113. Activities at landfills and sewage ponds would be modified by providing more effective cover of materials; the need for installing coyote-proof fences should be discussed.

114. Insofar as possible, be sure that refuse containers in residential areas have self-closing lids, that there is regular refuse pickup (more available, cheaper?) etc.

113. & 114. Not Applicable: Ravens are considered a threat to juvenile tortoises, not MGS. There have been no studies showing raven predation of MGS, therefore this prescription is not considered applicable to MGS.

Associated Threat: Subsidized Predation

Goal Statement from USFWS/CDFG: Minimize/reduce subsidized predators from habitats managed for tortoises [MGS] (CD (Tortoise Management Areas) [MGS Management Area] first, then into middle management zone (Middle Management Areas) [Not Applicable].

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

113. & 114. None.

Potential Task Group Activities:

(A) None.

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113. Activities at landfills and sewage ponds would be modified by providing more effective cover of materials; the need for installing coyote-proof fences should be discussed.

114. Insofar as possible, be sure that refuse containers in residential areas have self-closing lids, that there is regular refuse pickup (more available, cheaper?) etc.

113. & 114. Not Applicable: Ravens are considered a threat to juvenile tortoises, not MGS. There have been no studies showing raven predation of MGS, therefore this prescription is not considered applicable to MGS.

Associated Threat: Subsidized Predation

Goal Statement from USFWS/CDFG: Minimize/reduce subsidized predators from habitats managed for tortoises [MGS] (CD (Tortoise Management Areas) [MGS Management Area] first, then into middle management zone (Middle Management Areas) [Not Applicable].

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

113. & 114. None.

Potential Task Group Activities:

(A) None.

115. Applicable measures given in “construction activities” should be moved to this section for ground-disturbing activities.

115. See prescriptions 28. and 81.

Associated Threat: Mineral Development

Goal Statement from USFWS/CDFG: Minimize or eliminate adverse effects to CD (Tortoise Management Area) [MGS Management Areas].

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

115. This prescription relates to the initial construction and ongoing activities at a given mine inside MGS Management Areas. Specific restrictions, guidelines, etc. identified for certain construction activities should be considered relative to mining activities inside management areas. Once identified, the Team should ensure that any Task Group organized to discuss mining issues should have copies of the prescriptions relating to new mine construction. In addition to the actual mine site, potential impacts associated with haul roads should be considered and measures implemented to minimize those impacts.

Potential Task Group Activities:

(A) The Task Group should determine if any of the prescriptions determined for “Construction Activities” will affect construction and operation of mines inside MGS Management Areas.

116. Restoration under SMARA or other applicable laws should strive to reclaim lands to constitute tortoise habitat as a goal.

116. Restoration under SMARA or other applicable laws should strive to reclaim lands to constitute MGS habitat as a goal.

Associated Threat: Mineral Development

Goal Statement from USFWS/CDFG: Minimize or eliminate adverse effects to CD (Tortoise Management Area) [MGS Management Areas].

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

116. This prescription reflects current management, in that lead agencies typically require mining operations to recontour mine pits, spoil piles, etc. to near-natural, pre-mining conditions. Additionally, revegetation is a standard requirement of mine closure. Under this prescription, the miner would be obligated to strive for recontouring and revegetation that would result, eventually, in habitat that could be used by MGS. As proposed, this prescription would apply to mining activity inside MGS Management Areas, only.

Potential Task Group Activities:

(A) Do not expect need for a Task Group, as this prescription reflects current management.

117. Within the Tortoise Management Area, operations resulting in greater than a certain acreage (e.g., 80 to 100 acres) of ground disturbance will be evaluated by the "Implementing Team" to determine if additional compensation and mitigation is required of the proponent.

117. Within MGS Management Areas, operations resulting in greater than a certain acreage (e.g., 80 to 100 acres) of ground disturbance will be evaluated by the "Implementing Team" to determine if additional compensation and mitigation is required of the proponent.

Associated Threat: Mineral Development

Goal Statement from USFWS/CDFG: Minimize or eliminate adverse effects to CD (Tortoise Management Area) [MGS Management Areas].

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

117. During the agency evaluation there was discussion as to putting a ceiling on the size of a given mine that would be covered by the programmatic 10(a) incidental take permit issued under the plan. The concern is that the "average" management prescriptions would be applicable to a 5-, 10-, or 60-acre mine, for example, but may not be applicable to a 1,000-acre mine. Rob Waiwood, Geologist with the California Desert District office of the Bureau of Land Management, indicated that 95% of current mining proposals on public lands within the planning area are covered by an existing, programmatic Biological Opinion for small mines. There was a general consensus that a 1,000-acre mine may be too large to fit within the scope of the plan, and that such a proposal should be considered on a case-by-case basis under a separate consultation with the USFWS and CDFG.

The Team recommends that prescriptions derived by the Task Group be equitable for mining activities on private *and* public lands. Currently, the small mining Biological Opinion relates to mine development on only public lands, whereas miners on private lands have to seek project-specific 10(a) permits.

Potential Task Group Activities:

(A) The Task Group should discuss the types of mines (would a cyanide leaching operation be covered?) and, more specifically, the size of a given mine that would be covered by the plan. The group should discuss the need for a size threshold, under which all operations would be permitted by the plan, above which separate consultation would be required.

(B) The Task Group should develop prescriptions that ensure equitable permitting on private and public lands.

118. Consider site-specific mineral withdrawals to facilitate tortoise recovery.

118. Consider site-specific mineral withdrawals to facilitate MGS conservation.

119. If Fort Irwin Expands South: Any land acquired would not be open to mineral entry.

119. Not Applicable: The southern expansion area is not within the known range of MGS.

Associated Threat: Mineral Development

Goal Statement from USFWS/CDFG: Minimize or eliminate adverse effects to CD (Tortoise Management Area) [MGS Management Areas].

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

118. Under this prescription, the public and concerned jurisdictions (particularly the Bureau of Land Management) are asked to consider the feasibility of mineral withdrawal (i.e., no right to mine a given area) for MGS Management Areas, only.

Potential Task Group Activities:

(A) The Task Group, which must include the Bureau of Land Management, is asked to consider the feasibility of mineral withdrawal, on a case-by-case basis, from certain lands within MGS Management Areas.

If Fort Irwin expands to the west, prescription 119 may be applicable.

120. On lands administered by the Bureau of Land Management, camping would be allowed within 100 feet of an existing trail inside the Tortoise Management Area and within 300 feet in Middle Management Areas.

120. On lands administered by the Bureau of Land Management, camping would be allowed within 100 feet of an existing trail inside MGS Management Areas; drivers will not crush shrubs.

Associated Threat: Non-Off-Highway Vehicle Recreation

Goal Statement from USFWS/CDFG: Minimize habitat disturbance and tortoise [MGS] mortality associated with non-OHV recreation.

Applicable Jurisdictions: Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

120. Currently, on Bureau of Land Management lands, camping is allowed within 300 feet of existing roads. Under this new prescription, camping would be allowed within only 100 feet of existing roads in MGS Management Areas. There would be a requirement that drivers will not crush shrubs en route to the camping spot.

Potential Task Group Activities:

(A) The Task Group should clearly define what is meant by “non-consumptive recreation,” and should produce a list of approved activities. Management prescriptions will likely need to be specific to the activities that would be allowed.

(B) The Task Group would discuss this proposal and accept or modify it.

121. Upland game guzzlers in tortoise habitat should be modified to prevent/reduce future tortoise mortality (first in the Tortoise Management Area, then in Middle Management Area).

121. Not Applicable: There has been no evidence that MGS are drowning in quail guzzlers, whereas modifications to reduce tortoise mortality could also benefit MGS.

Associated Threat: Non-Off-Highway Vehicle Recreation

Goal Statement from USFWS/CDFG: Minimize habitat disturbance and tortoise [MGS] mortality associated with non-OHV recreation.

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

121. None.

Potential Task Group Activities:

(A) None.

122. Hunting will be allowed and regulated by current legislation.

122. Proposed management prescription for the tortoise adopted, unchanged for MGS.

123. General shooting, other than hunting, is not allowed in CD (Tortoise Management Area).

123. Not Applicable: There is no evidence that MGS is affected by general shooting and hunting activities.

Associated Threat: Non-Off-Highway Vehicle Recreation

Goal Statement from USFWS/CDFG: Minimize habitat disturbance and tortoise [MGS] mortality associated with non-OHV recreation.

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

122. There was a consensus among the agencies that hunting regulations would remain in place, as regulated by current legislation. It may be appropriate for educational materials, developed under other management prescriptions, to be distributed to hunters using the planning area.

123. 1998 tortoise surveys revealed that there is a fair amount of target practice occurring in certain portions of the planning area. This activity is particularly common in the Kramer Hills and Iron Mountain areas, portions of which would be included within the proposed MGS Management Area south of Highway 58 and east of Highway 395. Even so, the threats analysis completed by biologist, David Laabs, did not identify shooting as a major threat to this species. As such, the Team does not consider general shooting and hunting to threaten MGS, and no restrictions are recommended for MGS Management Areas.

Potential Task Group Activities:

(A) None?

124. Non-consumptive recreation (e.g., hiking, birdwatching, horseback riding, and photography) is allowed within the Tortoise Management Area.

124. Non-consumptive recreation (e.g., hiking, birdwatching, horseback riding, and photography) is allowed within MGS Management Areas.

Associated Threat: Non-Off-Highway Vehicle Recreation

Goal Statement from USFWS/CDFG: Minimize habitat disturbance and tortoise [MGS] mortality associated with non-OHV recreation.

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

124. There was a consensus among USFWS and CDFG that these activities would be permissible in MGS Management Areas.

Potential Task Group Activities:

(A) The Task Group should define what is meant by non-consumptive recreation, and create a list of acceptable versus unacceptable activities.

125. The Tortoise Management Area boundaries should be signed or otherwise designated to identify boundaries and facilitate enforcement.

125. MGS Management Area boundaries should be signed or otherwise designated to identify boundaries and facilitate enforcement.

Associated Threat: Non-Off-Highway Vehicle Recreation

Goal Statement from USFWS/CDFG: Minimize habitat disturbance and tortoise [MGS] mortality associated with non-OHV recreation.

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

125. The Team strongly believes that the success of implementing management prescriptions will be dependent on an effective signing program, similar to that implemented for Wilderness Areas within the planning area. The desert user must understand that he/she is entering an MGS Management Area and that there are certain restrictions on uses in such areas.

Potential Task Group Activities:

(A) A Task Group should design a signing program that effectively delineates boundaries of MGS Management Areas. Specific recommendations should be made as to, at least, the following signing aspects: (a) Where are the signs to be placed? (b) What information should be put on the signs? Should they only state restrictions for the area or emphasize the special, ecological nature of the area being delineated? (c) Are there places where a kiosk would better serve the purpose than boundary signs, and what sort of information should appear on the kiosks versus signs? (d) What existing infrastructure is available to facilitate sign creation and placement (discussions with pertinent personnel of the Bureau of Land Management, State Departments of Recreation, etc. seems applicable)? Where MGS and Tortoise Management Areas overlap, the signing program may need to be altered to address both species.

126. Invasive weeds should not be used in landscaping adjacent to the Tortoise Management Area; i.e., African daisies along roadways, giant reed, etc.

126. Invasive weeds should not be used in landscaping adjacent to MGS Management Areas; i.e., African daisies along roadways.

127. Management prescriptions designed to minimize impacts associated with other threats, particularly OHV, grazing, fire, construction, etc. will assist in minimizing continued support of non-native species.

127. Proposed management prescription for the tortoise adopted, unchanged for MGS.

Associated Threat: Invasive Weeds

Goal Statement from USFWS/CDFG: Minimize opportunities to spread weeds.

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

126. There are many plants that are known to be invasive to desert ecosystems that should be avoided in landscape design. Some of these have been published by the California Exotic Pest Plant Council and include tamarisk, giant reed, oleander, Mexican fountain grass, etc. The Team, in conjunction with Dr. Jeff Lovich, Dave Magney, Tom Egan, and others, will develop a list of plants that should be avoided in landscape design in MGS Management Areas.

Potential Task Group Activities:

(A) The Team will provide the list to the Task Group for review and comment. City and County planners, in particular, should discuss the implementation of a management prescription that would regulate landscaping in MGS Management Areas to minimize the spread of invasive, exotic pest species in the planning area; i.e., have County planners require that certain species not be used in landscape design.

128. Create and/or enforce ordinances against illegal dumping.

129. Implement programs to clean up existing, illegal dumps on private and public lands in the Tortoise Management Area.

130. Better maintenance and litter removal from various recreation sites and problem areas.

128., 129., & 130. Not Applicable: These threats are more applicable to tortoises. There have been no studies showing raven predation of MGS, therefore these prescriptions are not considered applicable to MGS.

Associated Threat: Garbage and Litter

Goal Statement from USFWS/CDFG: Reduce amounts of litter/garbage.

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

128., 129., & 130. None.

Potential Task Group Activities:

(A) None.

131. Cross-country vehicle travel will not be allowed for commercial activities in the Tortoise Management Area.

131. Cross-country vehicle travel will not be allowed for commercial activities in MGS Management Areas.

132. Commercial activities that result in ground disturbance or adverse effects would not be allowed in the Tortoise Management Area.

132. Commercial activities that result in ground disturbance or adverse effects would not be allowed in MGS Management Areas.

Associated Threat: Commercial Uses

Goal Statement from USFWS/CDFG: Ensure that harvesting does not alter the basic structure of the plant community; minimize adverse effects to tortoises [MGS] and habitat.

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, Joshua Tree National Park, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

131. & 132. "Commercial Uses" refers to plant harvest, commercial filming, etc. "No cross-country travel" is consistent with prescriptions given elsewhere for a number of threats. As per prescription 132., filming and plant harvest would be allowed in all areas if no ground disturbance or adverse effect were associated with the activity, otherwise the activity could only occur outside MGS Management Areas.

Potential Task Group Activities:

(A) If necessary, a Task Group could be formed to discuss this issue. The Bureau of Land Management, which presently issues most permits for temporary commercial filming activities, should consider how this prescription would affect that industry or the Bureau's administration of those activities. It may be appropriate to list those activities that would be allowed or not, and include areas regulated under this prescription.

133. Increase ranger patrols to discourage such activities.

134. Identify problem areas through ranger patrols and other efforts and determine solutions.

135. Public education should emphasize that tortoises are not to be handled or otherwise harmed.

133., 134., & 135. Not Applicable: Vandalism is a threat relative to tortoises that does not affect MGS.

Associated Threat: Vandalism

Goal Statement from USFWS/CDFG: Eliminate killing, maiming, etc., and collection of tortoises [MGS].

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

133., 134., & 135. None.

Potential Task Group Activities:

(A) None.

136. Educate the public about risks associated with handling or relocating tortoises.

136. Not Applicable: This threat was identified for tortoises, but does not apply to MGS.

Associated Threat: Handling and Manipulation of Tortoises [MGS]

Goal Statement from USFWS/CDFG: To provide guidance to the general public and professionals on when, how, why, and where to handle tortoises [MGS].

Applicable Jurisdictions: None..

Non-applicable Jurisdictions: None.

Team Recommendations:

136. None.

Potential Task Group Activities:

(A) None.

137. Need to discuss alternatives for disposition of tortoises taken during removal surveys: (a) euthanasia versus translocation; (b) translocate them into the nearest suitable area; (c) place them into conservation camp (like Clark County) prior to final disposition; (d) use them for coordinated translocation studies; (e) adopt them out; etc.

137. Not Applicable: Applicable only to tortoises.

Associated Threat: Handling and Manipulation of Tortoises [MGS]

Goal Statement from USFWS/CDFG: To provide guidance to the general public and professionals on when, how, why, and where to handle tortoises [MGS].

Applicable Jurisdictions: None..

Non-applicable Jurisdictions: None.

Team Recommendations:

137. None.

Potential Task Group Activities:

(A) None.

138. Biological monitors will handle tortoises as per "Guidelines for Handling Tortoises During Construction Projects" (DTC 1996).

141. Scenarios will be described where authorized biologists handle tortoises during removal surveys and environmental monitors fill in afterwards for operations at mines, bases, and other large-scale projects.

138. & 141. Not Applicable: Applicable only to tortoises.

Associated Threat: Handling and Manipulation of Tortoises [MGS]

Goal Statement from USFWS/CDFG: To provide guidance to the general public and professionals on when, how, why, and where to handle tortoises [MGS].

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

138. None.

141. None.

Potential Task Group Activities:

(A) None.

139. Scientific manipulation of tortoises is authorized by federal section 10(a)(1)(A) permits and 2081 for the State; the federal portion of this permit would be issued under section 10(a)(1)(B) and section 7 (section 2081.1 and 2090 for the State).

140. Translocation and other science-based studies implied or required by this plan also require separate authorization under federal and State scientific collection permits.

139. & 140. Not Applicable: Applicable only to tortoises.

Associated Threat: Handling and Manipulation of Tortoises [MGS]

Goal Statement from USFWS/CDFG: To provide guidance to the general public and professionals on when, how, why, and where to handle tortoises [MGS].

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

139. & 140. None.

Potential Task Group Activities:

(A) None.

142. If Fort Irwin Expands South: Fort Irwin would fund the translocation exercise and devise a plan that would meet with agency approval before it is implemented.

143. If Fort Irwin Expands South: Tortoises would be moved from harm's way in expansion areas.

142. & 143. Not Applicable: The southern expansion area is not within the known range of MGS, nor would MGS be translocated out of harm's way.

Associated Threat: Handling and Manipulation of Tortoises [MGS]

Goal Statement from USFWS/CDFG: To provide guidance to the general public and professionals on when, how, why, and where to handle tortoises [MGS].

Applicable Jurisdictions: None.

Non-applicable Jurisdictions: None.

Team Recommendations:

142. & 143. None.

Potential Task Group Activities:

(A) None.

These prescriptions may be applicable if Fort Irwin expands west into MGS habitat.

144. Tortoises found during drought conditions or summer should be excavated just before sunset and moved to an existing burrow (preferably their own) at night.

144. Not Applicable: Applicable only to tortoises.

145. Timing of scientific studies may need to be modified due to persisting drought conditions.

145. MGS studies should be of sufficient duration (at least five consecutive years?) to determine ecology of the squirrel under drought and non-drought conditions.

Associated Threat: Drought

Goal Statement from USFWS/CDFG: During drought, minimize stress and other adverse effects to tortoises [MGS] that may not occur under normal conditions.

Applicable Jurisdictions: California City (to be determined), Ridgecrest, Inyo County, Kern County, Los Angeles County (to be determined), San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management, China Lake Naval Air Weapons Station, Fort Irwin National Training Center, Edwards Air Force Base.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, Joshua Tree National Park, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms.

Team Recommendations:

145. The West Mojave Plan must outline a study design, including study methodology, site location, duration, costs, etc. that addresses the ecology of MGS in the southern and central portions of the planning area. Dr. Leitner's studies in the extreme, northwestern portion of the MGS range may not be applicable to areas located to the south. The studies should be of sufficient duration to better understand MGS ecology during drought and non-drought conditions (i.e., the nine, consecutive year study performed by Leitner in the Coso Range was sufficient to include three drought and six non-drought years)

Potential Task Group Activities:

(A) The Task Group that considers the cost of the plan must include discussion on the cost of this study. Dr. Leitner should be invited to serve on this Task Group to provide guidance based on nine years of similar studies.

(B) Adaptive management scenarios should be discussed that would use, in part, results of these studies to ensure that the most applicable conservation measures are being implemented. For example, if studies in the south confirm that MGS are relying on winterfat and spiny hopsage during drought years (as has been shown in the north), it may be appropriate to adjust MGS Management Area boundaries to be sure that these essential habitat components are being adequately protected throughout the range.

Associated Threat: Wild Horses and Burros

Goal Statement from USFWS/CDFG: None identified.

Applicable Jurisdictions: China Lake Naval Air Weapons Station.

Non-applicable Jurisdictions: Adelanto, Apple Valley, Barstow, California City, Ridgecrest, Inyo County, Kern County, Los Angeles County, San Bernardino County, Indian Wells Valley Water District, State Lands Commission, State Department of Parks and Recreation, California Department of Fish and Game, Bureau of Land Management, Hesperia, Lancaster, Palmdale, Twentynine Palms, Victorville, Yucca Valley, Joshua Tree National Park, Marine Corps Logistics Base at Nebo/Yermo, Marine Corps Air Ground Combat Center at Twentynine Palms, Fort Irwin National Training Center, Edwards Air Force Base.

Team Recommendations:

No prescriptions were identified relative to tortoises, consequently, none has been recommended for MGS. There may be some overlap between the proposed MGS Management Area on China Lake and horse/burro occurrence needs to be confirmed with O'Gara or other person.

Prescriptions, if any, should be discussed with CDFG on 28 October 1998.

Potential Task Group Activities:

(A) None? Discuss potential issue with China Lake personnel.

